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6211

LONG'S GARL

Spring, 1929



Immense Prize-Winning Dahlia, "Champagne." Tubers, \$1.00 Each

THE J. D. LONG SEED COMPANY

Boulder, Colorado

Dazzling Zinnias



Large, deep flowers characterize the Dahlia-Flowered Zinnias

SONG'S DAHLIA-FLOWERED ZINNIAS (*True Aristocrats*)

- Z13 Exquisite. Light Rose, with center a deeper rose. Very large. Pkt. 15c; $\frac{1}{4}$ oz. 60c.
 Z14 Golden State. Rich orange-yellow. Pkt. 15c; $\frac{1}{4}$ oz. 60c.
 Z15 Crimson Monarch. Gigantic. Largest and best of the red shades. Pkt. 15c; $\frac{1}{4}$ oz. 60c.
 Z16 Dream. A fine deep lavender, turning to purple. Pkt. 15c; $\frac{1}{4}$ oz. 60c.
 Z17 Lemon Beauty. Immense golden-yellow on brown. A pastel shade. Pkt. 15c; $\frac{1}{4}$ oz. 60c.
 Z18 Canary Bird. Immense primrose. Pkt. 15c; $\frac{1}{4}$ oz. 60c.
 Z19 Polar Bear. Pure white. The largest white zinnia. Pkt. 15c; $\frac{1}{4}$ oz. 60c.

SPECIAL: Any 2 pkts. Dahlia-Flowered Zinnias for 25c; any 7 for 75c.

SONG'S COLOSSAL ZINNIAS (*Gorgeous*)

- | | | | |
|----------------|-------------------|-----------|------------------|
| Z1 Snow White | Z2 Apricot-yellow | Z3 Pink | Z6 Golden yellow |
| Z7 Rich Orange | Z8 Purple | Z9 Salmon | Z10 Scarlet |

Price for any color Colossal: Pkt., 10c; $\frac{1}{4}$ oz., 30c; $\frac{1}{2}$ oz., 50c; oz., 90c.

SONG'S MASTODON MIXED ZINNIAS FOR 1929 (*Unusual*)

- Z20 A marvelous "All-In-One" mixture of my gigantic Dahlia-Flowered Strain and choicest Colossal in giant size and rare colors. Bound to make a wonderful show from midsummer to killing frost. Pkt. 10c; $\frac{1}{4}$ oz. 50c; oz. \$1.50

Modern Zinnias---The "Billboard Flowers"

That's what a Boulder flower lover called them one day in speaking of these immense, dazzling zinnias. They catch the eye from afar. Use zinnias liberally for garden color and for cutting.

LONG'S Superb Iris**Splendid Named Varieties**

Healthy stock, grown in sunny Colorado, the ideal iris climate. Standard divisions, all guaranteed true to name.

All Iris Priced Prepaid Anywhere in U. S.

AMBASSADEUR. Standards bronzy-violet. Falls rich velvety red-violet. Each, 75c; 3 for \$1.60.

ANNA FARR. Standards white, lightly bordered pale blue. Falls white with pale blue markings. Each, 50c.

ASIA. Very tall, robust plant. Standards pale lavender, suffused yellow at base. Falls light violet-purple. Each, \$1.60; 3 for \$4.00.

BLACK PRINCE. The true Perry origination. (Not Kochi, often listed as Black Prince.) Standards intense violet-blue. Falls black-purple. Each, 50c.

BRANDYWINE. Both standards and falls light hyssop-violet, with red-orange beard. Each, \$1.00; 3 for \$2.00.

BRUNO. Standards bronze, tinted lavender. Falls rich red-purple. Large and velvety. Large divisions, each \$10.00; 3 for \$25.00.

DREAM. Standards and falls both lilac to Chinese violet. Classified as pink, and one of the finest in this color class. Each, 50c.

KOCHI. Both standards and falls rich velvety-purple. Early. Two for 25c.

ISOLENE. Standards lovely rose-pink. Falls purplish-old rose with golden throat. Each, 25c.

IRIS KING. Standards golden yellow. Falls rich velvety maroon, bordered yellow. Superb. Each, 25c.

LADY FOSTER. Standards pale blue. Falls light blue-violet. Each, \$1.00.

LA NEIGE. Pure glistening, waxy white. The standards are carried horizontally, and resemble those of the Spanish and English iris. Exquisite French variety. Each, 25c.

LENT A. WILLIAMSON. Very large flower on tall, strong stem. Standards lavender-violet. Falls velvety violet-purple. A massive iris, vigorous in growth. Each, 50c.

MADAME CHOBOUT. Cream-yellow dotted brown. Each, 30c; 3 for 70c.

MAGNIFICA. Standards light violet-blue. Falls dark reddish-violet with brown stripes at base. An enormous, magnificent flower. Each, \$1.00; 3 for \$2.00.

MOTHER OF PEARL. Both standards and falls iridescent shades of mother of pearl. Good large flowers on tall stems. Each, 50c.

MRS. NEWBRONNER. Rich golden daffodil-yellow. Two for 25c.

OPERA. Medium size iris of most striking color. Standards violet-rose. Falls purple-violet. Each, \$1.00; 3 for \$2.00.

ORIFLAMME. An enormous flowered French iris of most pleasing color combination. Standards dark lavender. Falls hortense-violet. Edges of the sweetly-scented blossoms are daintily waved or crimped like a Spencer sweet pea. Each, 25c.

PALLIDA DALMATICA. Very tall strong growing plant of lavender-blue. Each, 25c.

STAMBOUL. The cupped standards are of light wisteria-violet. Falls, reflexed, Bradley's violet. Each, 35c; 3 for 75c.

SWEET LAVENDER. Standards French-gray lavender. Falls dark purple. Each, 50c.

WHITE KNIGHT. Strong growing plant with pure white blossoms. Each, 25c.

Iris at Wholesale Prices

Prepaid Anywhere In United States

For dealers, large growers, clubs, or anyone who can use large lots. This is your opportunity to plant iris liberally in masses, or borders—along the drive to the garage, for instance. A big bed, or row, all one variety makes a great display. 25 or more at 100 rate.

	Per 3	Per 10	Per 100
Anna Farr	\$1.10	\$3.30	\$28.00
Black Prince (Perry) ...	1.00	3.20	30.00
Dream	1.00	3.00	25.00
Kochi .....	.30	.70	4.00
Isolene .....	.50	1.20	8.00
Iris King .....	.50	1.00	6.00
La Neige .....	.50	1.20	8.00
Lent A. Williamson	1.00	2.50	20.00
Mother of Pearl	1.00	3.20	30.00
Mrs. Newbronner .....	.30	.70	3.90
Oriflamme .....	.55	1.30	8.40
Pallida Dalmatica .....	.50	1.25	10.00
Sweet Lavender	1.00	3.20	30.00
White Knight .....	.50	1.10	7.00
Mixed Iris (not labeled)	1.00	3.00	6.60

(Dealers and growers who can use large lots and prefer to buy f. o. b. Boulder, please write for iris prices not prepaid.)

Suggestions for Growing Iris

Plant any time in fall or very early in spring.

Always cut tops back to within several inches of the root when dividing and moving. **Iris can't stand wet feet.** If soil not well drained, set the iris roots in raised beds or rows, so water will drain off readily. Plant the roots very shallow, barely covering the thick fleshy portion. Press the root or rhizome firmly with foot after planting. "Step on it," and step hard.

Water until root growth is well begun. Little attention needed after that. Set roots a foot or more apart. Each small division will make a clump in a few years. Divide clumps and re-set when get quite large or refuse to bloom well.

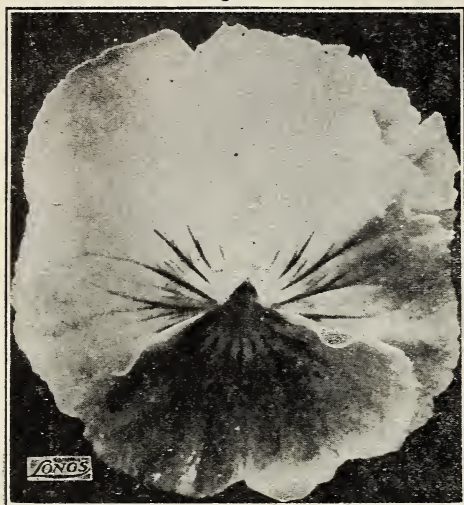
Keep manure away from iris roots. Don't over-water them. Remove and burn dead tops very early in spring.

To ship iris roots safely, pack them dry. They don't need moisture when packed; may be ruined by it.

Peony Roots Next Fall

No peony roots this spring, but our usual offers of best kinds will appear in next fall catalogue, to be mailed you about middle of September.

***LONG'S* Super-Giant Pansies**



***LONG'S* Super-Giants, Mixed Colors**

P1. Flowers of very large size, some light, some medium in color, and some deep velvety colors that you may never have believed could be had in pansies. Many blossoms are frilled and ruffled like a Spencer sweet pea.

New Swiss Giant Pansies

Flowers of gigantic size, great substance, perfectly round, and in the most novel color combinations, never before found in pansies. Plants robust in growth. This strain makes very little seed, and can never be very cheap. Pkt. (100, or more, seeds), 50c; 6 packets for \$5.00. (No plants this year.)

100 *LONG'S* Outdoor Pansy Plants for \$2.00

Hardened outdoor plants from Super-Giant seed, sown last fall. The plants are wintered right out in the open, some slightly covered, some not covered at all.

I aim to hold the tops back and develop a lot of strong fibrous roots for each plant. This is just the reverse from usual practice of forcing the tops by growing the plants in heavily manured ground and forcing them into bloom under glass.

My ideal plant for setting out is one with strong roots and small tops. If tops are too large I may prune them back. This kind of plant stands shipping fine, and will make good in your garden. I seldom transplant the large plants, but use the smaller ones described above.

I can ship these pansy plants almost any time after ground is thawed out in March. Early in April is a good time. Have made several sowings so as to have them coming on all spring until June. Please understand that I do not promise any of these to be in bud or in bloom, though some in each order often are. It just depends on the season. It's better to set out a small plant early than a large one late. The small early set plants bloom very soon.

In *LONG'S* Super-Giants are found the solid colors; others veined, margined, blotched, shaded, blended. Havana brown, mahogany, bronze and copper shades of the Masterpiece and Bugnot; the Giant Carnot and Giant McKinley—these favorites and many others are included. Packet (200 seeds), 25c; 5 pkts., \$1.00. Wholesale prices: 1/4 oz., \$2.70; 1/2 oz., \$5.00; oz., \$9.00.

Some Other Fine Pansies

(Seeds only. No plants.)

- P2. **LARGE FLOWERING.** Mixed. Pkt., 10c; 1/4 oz., \$1.00.
- P3. **DARK NAVY BLUE.** Pkt., 10c.
- P4. **JET BLACK.** Of large size. Pkt., 10c.
- P5. **WHITE.** Large. Pkt., 10c.
- P6. **GOLDEN YELLOW.** Large. Pkt., 10c.
- P7. **MAD. PERRET.** Lovely shades of pink and rose. Pkt., 15c.
- P8. **GIANT MASTERPIECE.** (Spencer Pansies.) Many petals curled; flowers appear double; mostly dark, velvety shades. Mixed. Pkt., 15c.
- P9. **GIANT BUGNOT.** Shades of red, bronze, and reddish cardinal. Mixed. Pkt., 15c.
- P10. **GIANT PRESIDENT CARNOT.** White ground with five rich violet blotches. Pkt., 15c.
- P11. **GIANT PRESIDENT MCKINLEY.** Rich glowing yellow, each petal blotched with deep reddish brown. Pkt., 15c.
- P12. **GIANT BRONZE.** Bronze and brown shades predominate, but many do not come bronze. Pkt., 15c.

Set these plants out early. They are used to snow and ice. Get the full season's joy from your pansy bed. Sold in mixed colors only. 14 (smallest order packed), 50c; 40 for \$1.00; 100 for \$2.00; 200 for \$3.90; 300 for \$5.70; 400 for \$7.40; 500 for \$9.00, pre-paid.

Pansy Plants In Bloom

14 for \$1.00; 40 for \$2.00.

It's far better to buy the transplanting size a little earlier. You'll have blooming plants in a short time. Can be set out again, after bloom, if you wish. If wanted in bloom for Decoration Day, set the transplanting size out in April or early May. Then transplant last of May.

Price for pansy plants in bloom, mixed colors only: 14 for \$1.00; 40 for \$2.00; 100 for \$4.00.

Notice: All pansy plants shipped pre-paid and safe delivery guaranteed (anywhere within 5th zone). Prefer not to ship farther, but if do it will be by express, YOU pay express.

Delightful Delphiniums

After careful study I've changed my ideas somewhat regarding the very densely covered spikes of the Wrexham or "Hollyhock" type. A few of these in an assortment or mixture are very worthy and interesting. By themselves, they are also massive and impressive. But I'm inclined more and more to the types that are more open or branching, with an airy, graceful placement of side spikes and blossoms. These, of course, with flowers of large size and loveliest colors and combinations of colors.

As you know, Delphiniums run largely to blue tints and shades. Not so long ago we had only the solid light blue and dark blue. Now we get an amazing and delightful variety of blues, many in combination with lilac, lavender, heliotrope, and near-pink. And the types or forms are as varied as the colors, many blossoms with a double set of petals instead of just one, the two sets often different in color.

So far I've not segregated the different types or colors, nor saved seed in separate colors or shades. May do this some time. But it seems most fascinating to me to let them grow and bloom in masses of the various colors, all harmonizing. So that is the way you will have them from seed or plants I supply this season—all in one grand and glorious mixture, including largely the more graceful open type plants, but some also of the massive Wrexham or "Hollyhock" strain.

Price for seed saved from my best stock or exhibition plants: Pkt., \$1.00; Small Pkt., 50c; $\frac{1}{4}$ oz., \$2.50; oz., \$9.00.

Delphiniums may be sown right outdoors early in spring. Many will bloom the same season. With no protection, the plants will live over and increase in size and vigor.

The illustration on this page is of a spike grown in my garden from outdoor spring-sown seed last season. I planted early and gave good ground, good care. Hundreds bloomed, were cut and sold to a Denver florist at top prices. (This illustration can, of course, show but one type. There were many, many others.)

Delphinium Plants

From seed containing a liberal percent of the fine new kinds. Strong seedlings, many of which bloomed last year. Prices very reasonable. 3 (smallest order packed) for 60c; 7 for \$1.00; 15 for \$2.00; 33 for \$4.00. All prepaid. (Mixed colors only.)

Note: Delphiniums are very hardy. They begin growth real early in spring. Is best to set these plants out when you do your early gardening. But will thrive if shipped and planted later. If sent after growth well started we cut the tops back before packing. New shoots start at once from crown of plant. **But order and plant early if you can.** Means better results the first season.

Delphinium Seed for Fall

Sow in August and early September, and you should have nice seedling plants that will winter over with little or no protection. Such plants should bloom next year. You may order new crop seed any time next summer and fall. Seed will be mailed just as soon as ripe and cured. Prices same as for this spring.

Splendid Delphinium at 25c Pkt.

FO13. Not so classy as my best selection, but far ahead of usual grade. **Really fine.** Pkt., 25c; $\frac{1}{4}$ oz., 75c; oz., \$2.50.



LONG'S Famous Spencer Sweet Peas

"Early Bird" Spencers

These new "Early Bird" Spencers are the kind the florists grow in greenhouses, but they do splendidly in the open garden also. Order some "Early Birds" along with your usual sweet pea favorites and try them out. They'll 'sprise you some morning by showing color much sooner than you have been used to looking for first sweet pea blossoms.

(Half ounce at ounce rate)

SP80. AMETHYST. Rich royal purple. Pkt., 10c; oz., 50c.

SP82. AVIATOR. Dazzling crimson-scarlet. Pkt., 10c; oz., 50c.

SP83. GLITTERS. Combination of bright fiery orange and deep orange. Pkt., 10c; oz., 50c.

SP84. LAVENDER KING. Lovely true lavender throughout. Pkt., 10c; oz., 50c.

SP85. ROSE QUEEN. Pleasing shade of rich pink with suffusion of rose. Pkt., 10c; oz., 50c.

SP88. SNOWSTORM. (Improved.) The largest and finest extra early White Spencer. Pkt., 10c; oz., 50c.

SP89. EVOLANEK'S ROSE. Giant rose-pink. Considered by most florists as best deep pink. Pkt., 15c; oz., 60c.

SP90. "EARLY BIRD" MIXTURE. A superb mixture of these extra early flowering Spencer sweet peas. Pkt., 10c; oz., 40c.

LONG'S "33-in-1" Spencer Mixture

SP41. In this mixture you get the best of up-to-date Spencers. I use 33 different named varieties. Of course you might not get all 33 kinds in a 10-cent packet—possibly not in an ounce—but they are all in this mixture. It is my ambition to make this the finest Spencer mixture offered this season. Pkt., 10c; oz., 30c; 2 oz., 50c; ¼ lb., 90c; lb., \$3.00.

"Lovely 'Leven" Spencers

'Leven 10c Pkts. for 75c

From over 25 of my splendid named varieties of giant Spencers, I'm going to select eleven that will cover practically all the main colors, tints and shades, giving you a regular 10-cent packet of each these "Lovely 'Leven". Then just for good measure, I'll throw in a 10-cent packet of my "33-in-1" mixed Spencers, and make the price only 75c for all.

Please note carefully that to get this special price you must take the assortment as it is put up. You cannot specify certain varieties at this price. These assortments will be put up in advance—a lot of them—ready to send out without any further attention. Just say, "Lovely 'Leven" for 75c, and you will get our own assortment, which will indeed be lovely.

Larger Lot "LOVELY 'LEVEN". For \$1.50 I will send you a half ounce each of these Spencers, my selection, with half an ounce "33-in-1" mixed Spencers thrown in for luck.

LONG'S Special Mixture

SP43. My mixture that has given such splendid satisfaction for a moderate price. It includes the best of the grandiflora varieties, a "right smart" of Spencers, and a sprinkling of extra early kinds, the latter coming so early that they spring a delightful surprise on you before you are looking for first blossoms. Pkt., 10c; oz., 15c; 2 oz., 25c; ¼ lb., 40c; lb., \$1.35.

SP39. CUPID SWEET PEAS. Mixed. Pkt., 5c; oz., 20c.

Perennial Peas

SP60 White. SP61 Pink. SP62 Red. SP63 Mixed. Pkt., 15c.

Two Lovely New Spencer Sweet Peas

SP26. PINKIE. (Morse Origination.) The largest deep rose pink to date. Vigorous grower, continuous bloomer, with long, stout stems. Nicely waved petals. A glorious pink. Horticultural Advertiser of London, England, says: "PINKIE is the most distinct pink seen for a long time." Pkt., 15c; ½ oz., 30c; oz., 60c.

SP32. WINNIE MORSE. Another Morse masterpiece. Flowers mostly duplexed and delightfully frilled. Color is cream ground, flushed soft rose pink. The effect when bunched is most pleasing. Sold in packets put up by the originator for us. Pkt., (20 seeds), 25c.

Many Spencers Included In LONG'S Special Mixture

"How To Grow Finest Sweet Peas"—See page 63.

LONG'S Giant Flowered Spencer Sweet Peas

Large blossoms, often 4, on long stems. Edges of blossoms usually waved or frilled, giving an added charm to this popular flower.

3 Pkts., 25c; 4 or More Pkts. at 8c Each

½ Oz. at Oz. Rate

SP0. AUSTIN FREDERICK. Many sweet pea fans consider this the best lavender to date. Extra large and fine. Pkt., 10c; oz., 40c.

SP1. BARBARA. Superb salmon. Pkt., 10c; oz., 30c.

SP2. BLANCHE FERRY. Pink and White Spencer. Pkt., 10c; oz., 30c.

SP3. BUTTERCUP. Best cream or primrose. Pkt., 10c; oz., 30c.

SP5. CONSTANCE HINTON. Finest exhibition White Spencer. Pkt., 10c; oz., 40c.

SP6. COUNTESS SPENCER. The original Spencer. Clear pink. Pkt., 10c; oz., 30c.

SP8. DEFIANCE. Very large orange-scarlet, absolutely sun-proof. Often 4 large wavy blooms on stem. Pkt., 10c; oz., 40c.

SP9. ELFRIDA PIERSON. Large and lovely shell pink, tinted salmon. Pkt., 10c; oz., 30c.

SP10. GEO. SHAWYER. Giant salmon-rose. Pkt., 10c; oz., 30c.

SP11. HAWLMARK PINK. Rich, bright, rose-pink, flushed salmon. The richest colored sweet pea. Pkt., 10c; oz., 40c.

SP12. HEAVENLY BLUE. New large brilliant delphinium-blue. Pkt., 10c; oz., 40c.

SP13. HERCULES. Mammoth rosy pink. Improved Countess. Pkt., 10c; oz., 30c.

SP14. KING EDWARD. The finest pure red Spencer. Does not burn in sun. Pkt., 10c; oz., 30c.

SP15. KING WHITE. Large blossoms of purest, glistening white. Pkt., 10c; oz., 30c.

SP16. MRS. HITCHCOCK. Pale pink, flushed salmon on cream ground. Pkt., 10c; oz., 30c.

SP17. LORD NELSON. Splendid navy blue Spencer. Pkt., 10c; oz., 30c.

SP19. MARY PICKFORD. Very fine. Dainty cream-pink, lightly suffused salmon, the effect most charming. Pkt., 10c; oz., 40c.

SP20. MARGARET ATLEE. (Improved.) Extra large flowers of rich glowing pink, suffused with salmon. Pkt., 10c; oz., 40c.

SP21. MASTERPIECE. Large clear lavender, slightly flushed rose. Pkt., 10c; oz., 30c.

SP22. MRS. TOM JONES. Discontinued. Heavenly Blue is better.



SP23. NUBIAN. (Improved.) Deep maroon. Pkt., 10c; oz., 30c.

SP24. ORCHID. Lavender, suffused pink. Pkt., 10c; oz., 30c.

SP25. PICTURE. Cream and pink shades, blended. Pkt., 10c; oz., 40c.

SP26. PINKIE. See opposite page.

SP27. ROSABELLE. Large light rose. Pkt., 10c; oz., 30c.

SP28. ROYAL PURPLE. Rich rosy purple. Large and fine. Pkt., 10c; oz., 30c.

SP29. ROYAL SCOT. True scarlet. Pkt., 10c; oz., 30c.

SP30. TANGERINE IMPROVED. Almost tangerine-orange. Pkt., 10c; oz., 40c.

SP31. THE CARDINAL. Intense poppy scarlet. Extra fine. Pkt., 10c; oz., 40c.

SP32. WINNIE MORSE. See opposite page.

SP35. YOUTH. Large white, pink, picotee edges. Pkt., 10c; oz., 40c.

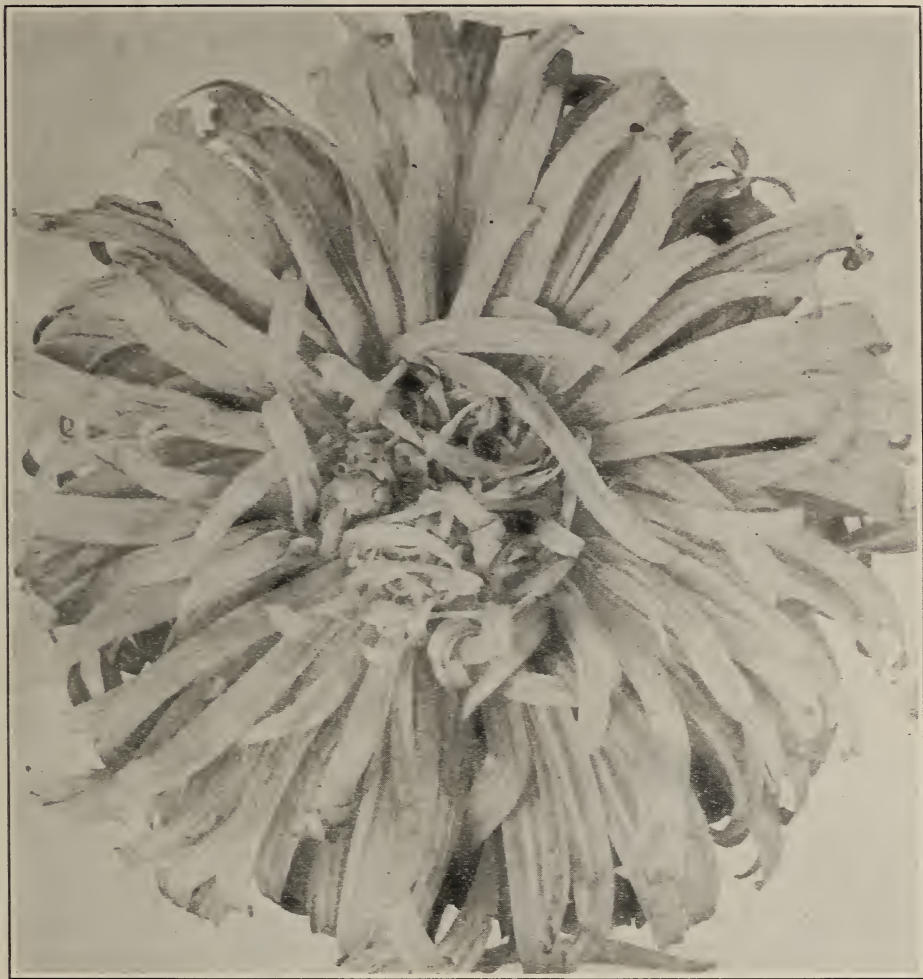
"LOVELY 'LEVEN" COLLECTION of Spencer sweet peas. Big value. See page 4.



Now You Can See Mary Pickford In Your Own Garden

EXQUISITE SPENCER SWEET PEA, "Mary Pickford". Originated by C. C. Morse Seed Co. This picture shows presentation of sweet pea basket by Mr. Lester L. Morse to Mary Pickford at Pickford-Fairbanks studio. The color of this delightful Spencer sweet pea is dainty cream pink lightly suffused with salmon. Vines vigorous. Stems long. Flowers large and beautifully waved. Pkt., 10c; oz., 40c. (While supply lasts, "Mary Pickford" will be included in our "LOVELY 'LEVEN" collection.)

New "California Giants" Asters



The long strong stems carry flowers of largest size, heavy substance, with long graceful petals attractively curled and twisted. It is truly an aristocrat vying with the chrysanthemum in size of flower and long stem. **COLORS:** (A30. White.) (A31. Rose-Pink.) (A32. Lavender.) (A33. Purple.) (A36. Mixed.) Any color California Giants, or Mixed, for 20c Pkt. 2 Pkts., 35c. 6 Pkts., \$1.00.

Crego-Astermum Asters

Both the shaggy type, like Giants of California. Little earlier but not so large. The two strains combined, in following colors, also mixed colors: (A8. White.) (A9. Rose-Pink.) (A10. Shell-Pink.) (A12. Lavender.) (A13. Mixed.) Choice, Pkt., 10c; 3 for 25c; 7 pkts. for 50c; $\frac{1}{4}$ oz., 50c.

Giant "Peach Blossom" Aster

Similar in type to Boulderado Beauty. Stems stout and long. Flowers large. Color suggests its name. Pkt., 10c; 3 pkts., 25c; $\frac{1}{4}$ oz., 50c.

LONG'S Special Mixture

To make this superb mixture I've used the kinds best for cutting—plenty of best white and pinks. Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Fancy Yellow Aster

There is no deep yellow in aster. But here's a light yellow, that will help some. Pkt., 10c.

Everlasting Aster

Color flesh-pink. It resembles a large Straw Flower. When cut and dried it retains its color and shape. Pkt., 10c.

See Back Cover Page for Other Asters.

Godetia—New Varieties

The Godetia (Satin Flower) is a hardy, easily grown, annual little known, yet one of the most pleasing of outdoor summer flowers. When in California last June, I selected several of the newest and finest Godetias from acres of these charming flowers then in bloom. Just sow the seed outdoors any time when you do your usual spring gardening. Cover seed $\frac{1}{4}$ to scant $\frac{1}{2}$ inch; thin to 8 inches.

F070. GODETIA, DWARF AZALEA-FLOW-EERED. About one foot high. Bushy plants covered with loveliest double rose-carmine flowers. Something you'll be proud to see in your garden. Pkt., 15c; 2 pkts., 25c.

F071. GODETIA, TALL GLADIOLUS-FLOW-EERED. Plants about 18 inches tall, which produce flower spikes much like the gladiolus, only much more graceful. The closely set double carmine flowers open along the spike same as glads, either in garden or after being cut. Splendid for cutting. Pkt., 15c; 2 pkts., 25c. (You may take one each the dwarf and tall listed here for 25c. Good idea to plant both.)

GODETIA, FINE MIXED. See page 14.

Tall Annual Larkspurs

Early sowing best. Forget the dwarfs. The new tall varieties are certainly fine. Easily grown from seed sown outdoors. Give each plant at least 6 inches in the row. Plants 2 to 3 feet tall. Continue to bloom long time. Very effective in borders and planted amongst shrubs. Splendid for cutting, and last well. Here are the finest varieties in separate colors that I selected from blooming fields grown by specialists in California.

F075. AGERATUM BLUE.

F076. BRIGHT ROSE.

F077. DARK BLUE.

F078. EXQUISITE PINK.

F079. LUSTROUS CARMINE.

$\frac{1}{4}$

F080. SCARLET ROSE.

Any of these 6 delightful colors at 10c a pkt.; 3 pkts., 25c; 6 pkts., 45c.

MIXED ANNUAL LARKSPUR. See page 15.

LONG'S Aster Plants

(Not Mailed Beyond 5th Zone)

Orders for plants are taken with the understanding that the plants will be sent when ready for setting out, the time depending on the season. Ready about June 1st. Now when I say "about June 1st," I'm something like the old maid who told the census taker she was "about 30 years old". Some seasons the plants are not ready until the 10th to 15th of June. If you wish them earlier you can buy the seed and start them indoors. Bear in mind asters do well sown right outdoors any time from middle of April to last of May.

MIXED ASTER PLANTS. Popular cut flower mixture. 16 plants (smallest quantity sold), 50c; 45 for \$1.00; 110 for \$2.00; prepaid.

PLANTS IN SEPARATE COLORS. White, Pink, Lavender and Purple. Your choice, 12 (smallest quantity sold), for 50c; 33 for \$1.00; 80 for \$2.00; prepaid.

Note: No certain type or variety aster plants. If want certain kinds, buy the seed.



Peony-Flowered Poppies

Gigantic blossoms like fine double peonies. Rich colors. Easy to grow. Sow outdoors. Thin to 6 inches. Shrimp Pink, Red, or Mixed colors. Choice, 10c Pkt. (The Shrimp Pink is exceptionally fine.)

Anemone Bulbs

Plant the bulbs any time from early spring to middle of June. The plants grow 8 to 12 inches high. Several flower stems come from a small bulb. Flowers are bright colors in mixture, some single, a few double, and several inches in diameter.

The Anemone bulbs are very peculiar. Dry, hard and apparently lifeless. But respond quickly when planted two inches deep in any good garden soil. Set the bulbs 4 to 6 inches apart. No special culture required. In fall, take up bulbs and store in a dry place, replant the next spring.

Price for these funny little bulbs that produce such a wealth of bloom: doz., 40c; 100 for \$2.80, prepaid.

Ranunculus Bulbs

Nothing produces a brighter effect than a bed of Ranunculus. The flowers are wonderfully good for cutting, also. Plants about a foot high with flowers two inches or so in diameter, many of them double, in a variety of bright and pleasing colors.

The bulbs are even funnier in appearance than those of the Anemone. They look like dried up bird's feet and of no value whatever. You'd swear they would not grow, much less produce beautiful flowers. But just plant them out in the garden any time after ground warms up and see them do their stuff. Set these little "crowfoot" bulbs about two inches deep, pressing them firmly in the soil.

Space the bulbs 5 or 6 inches apart, though may be a little closer. Just cultivate and water moderately. Easy to grow. In fall take up the bulbs, store in dry place away from frost. Replant the next spring. **Prices:** doz., 40c; 100 for \$2.80, prepaid.

LONG'S Rare Double Hollyhock, "Lilac Beauty"

I don't claim the honor of originating this splendid addition to the Hollyhock family. Found it in a mixture a few years ago. Liked it so well that I saved the plant and increased stock to add to my list.

Had never seen this color listed in catalogues. Later I found it offered by an English firm from whom I bought seed but their strain not so good as mine. The seed and plants I offer are from my own stock.

Not sure that Lilac is just the name for the color. Using Ridgeway's color chart, I found Chinese Violet seemed nearest to color of blossoms on my plants last summer. Anyhow, it's a beauty, and different in color from anything I've offered before. Not quite so double as blossoms shown on this page.

"LILAC BEAUTY" PLANTS: Year old, field grown. 2 for 60c; 5 for \$1.00; 11 for \$2.00. Prepaid.

"LILAC BEAUTY" SEED: Pkt., 10c; $\frac{1}{4}$ oz., 40c; oz., \$1.20.

You gain a year by planting roots this spring instead of seed. Hollyhocks bloom second year from seed, you know.

It's a good idea to plant both roots and seed. The roots frequently live over after blooming one season, but not always. The seed you sow this year will provide a new supply of blooming size roots for next summer. Sow seed from April to July. Plant roots early in spring. April best time.

"Colorado Sunset" Hollyhock

Color varies from copper to cream, but always charming. Prices for seed and plants reduced this season. Same price as Red, Pink, etc.

Double Hollyhocks**Six Other Colors**

Their double blossoms rival the rose in exquisite color and form.

Bloom second year from seed; first year from roots I sell. Plant roots early for best results. Red, White, Yellow, Maroon, Newport Pink, Black, "Colorado Sunset": 3 roots for 50c; 7 for \$1.00; each color labeled. Mixed colors, our selection, not labeled: 10 for \$1.00. All prepaid. Seed, any color, including "Colorado Sunset": Pkt., 10c; $\frac{1}{4}$ oz., 40c; oz., \$1.20.



Double Hollyhocks
"Rival Roses in Color and Form"

LONG'S Superb Petunias

F024. ROSY MORN PETUNIA. A gay and artistic petunia for beds and borders. Color soft rose-pink with light throat. Plants set a foot apart in good soil will fill all the space with perfect mass of bloom, beginning about 60 days from sowing and never letting up until frosts. Pkt., 10c.

F025. VIOLET PETUNIA. Similar in bushy habit of growth to Rosy Morn, but a beautiful deep violet color. Very rare. Pkt., 10c.

Giants of California

The largest often measure 4 to 4½ inches across. And such wonderful colors and markings! Then too, some are delightfully ruffled and frilled. Produces very, very little seed, making the seed as precious as gold dust. Pkt., 25c.

Balcony Petunias

Large flowering single sorts especially recommended for window boxes.

F060 Balcony White. F061 Balcony Blue.

F062 Balcony Rose. F063 Balcony Crimson.

F064 Balcony Mixed. Any color or Mixed, 20c Pkt.

Chinese Wool Flower

Flowers resemble a ball of wool. Plants branch freely and are covered with blooms. Very striking for garden display. **Can be dried for winter bouquets.** Sow in garden about May 1st or start indoors.

F026 Crimson. F027 Rose-Pink. F028 Yellow.

F029 White. F030 Mixed. Price any color or mixed: Pkt., 10c. (**F026 and F027** are best.)

Giant African Marigolds

These marigolds belong to the tall growing, double "pin-cushion" class of the popular marigold. My seed was grown by a specialist, who has bred these two colors up the nearest to perfection that has so far been attained. Most of them come double, though a few come single, but of unusual shape, so that some admirers like the single even more than the double. Plants grow about 3 feet high from seed sown outdoors after ground is warm. Easily transplanted. Should be thinned to 12 inches in good ground, for they make big bushes. They bloom and bloom from mid-summer to hard frosts.

F05. ORANGE PRINCE. A beauty. Deep golden orange. Immense blossoms. Pkt., 10c.

F06. LEMON QUEEN. Equal to Orange Prince, but a soft lemon yellow, making a fine contrast. Pkt., 10c.

Hardy Perennial Blue Salvia

F051. SALVIA AZUREA. Also called "Heavenly Blue Flowering Sage". Grows 3 to 4 feet high; stately willow-like growth; produces spikes of pretty sky blue flowers in great profusion. Will bloom first season from seed sown early outdoors or started inside and set out later in spring. Lives for years. Can be transplanted in early spring without harm. Blooms in August and September. Pkt., 15c.

California Poppy, "Copper Bowl"

F035. The richest color you can imagine. Unusual, unique, very pretty. Pkt., 10c.

Hardy, Fragrant Violets

Must be 8 or 10 years ago that I got a few clumps of these violets from a Denver wholesale florist, just for our own garden. The plants increase by sending out short runners and establishing new plants around the original one. We have moved these violets around from one place to another from time to time. They kept increasing, so that last spring I set out four long rows from the surplus, to grow clumps for sale this spring.

So this is how come you have an opportunity to secure some of these plants at this time. I don't know the name of the variety. They are just good healthy growing plants with large glossy leaves and dainty fragrant blossoms. Easy to grow.

I'm going to sell them in clumps only. You can separate the clumps into smaller clumps or into individual plants. I presume a clump will make several dozen plants at least. Price per clump, \$1.00; 3 clumps, \$2.50; 6 clumps for \$4.80 prepaid.

Rocky Mountain Columbine



The State Flower of Colorado. Very beautiful, hardy perennial; sepals blue; petals white. Thrives in any State. **Plant early.** Starts growth early in spring. Blooms here last of May, almost always in bloom Decoration Day. Large roots. All bloomed last year. Each, 40c; 3 for \$1.00; 10 for \$3.00, prepaid.

Some Extra Good Seeds, Plants and Roots for 1929

New Giant Hardy Carnation



F055. The finest to date. **Chabaud's Giant**, the new strain; not the old Chabaud type. Far superior also to Marguerite. (About 85% come double.)

Plants thick-set; stalks stiff, bearing immense double blossoms. Not so large as the greenhouse kinds, but surprisingly large, especially if disbudded, as florists treat their carnations. Bloom about 6 months from sowing. Start indoors for summer blooming. May be sown also in open garden. Give winter protection.

Colors: Red, Rose-Pink, Salmon-Rose, White, Mixed. Price for any color or mixed: Pkt., 25c; 5 pkts., \$1.00.

Double Bachelor Button

Far superior to the common single strain. Fine for cutting. **F0½** White. **F01** Blue. **F02** Rose. **F03** Mixed. Any color or mixed: Pkt., 10c; ¼ oz., 45c.

Geraniums from Seed

Geraniums are easily grown from seed. Sow in the garden or start indoors. Take up and pot the best plants in fall.

F033. GRAND ZONALE. Grown by Mrs. Shepherd. Mixed colors—scarlet, crimson, rose, pink, salmon, blush, white, variegated. Pkt., 25c. (See also page 29.)

Unusual California Poppies

F036. CROCEA. Rich orange, same as the well-known single Calif. State Flower, but double. All others single.

F037. GEISHA. Brilliant scarlet outside; inside rich golden orange.

F038. VESUVIUS. Rich, glowing, striking red. Very outstanding and attractive.

F035. "COFFEE BOWL". Bronzy-red, overlaid terra cotta. Form and color suggests the name I've given this variety.

F09. "PERSIAN RUG" MIXTURE. See page 27.

Price for any these five kinds: Pkt., 10c. (For other kinds see page 29.)



Statice (Sea Lavender)

F017. Very hardy **Perennial**, blooming second year from seed or first year from strong transplanted roots. Something like "Baby's Breath" but blue instead of white. Later, also, coming in midsummer to be used with "Glads" and other bouquets. **Seed:** 19c pkt. Extra good transplanted field-grown roots, 2 for 60c; 4 for \$1.00, prepaid.



New Double Gypsophila

F049. Great improvement over the single Gypsophila or Baby's Breath. **Perennial**, blooming second year from seed sown outdoors from April to June. Roots last for years, increasing in size. **Color, white.** About ¼th the plants will produce double flowers. Balance single or semi-double, and may be pulled out if not desired. The double is best for drying for winter; fine to use fresh also, to combine with sweet-peas and other flowers. Florists use lots of it—summer and winter. **Seed:** Pkt., 25c; 5 pkts., \$1.00. **Roots:** Mixed sizes. All should bloom. 7 for \$1.00, prepaid.

LONG'S Tried and True Flower Seeds

Delphinium, Gold Medal Hybrids

F013. A perennial, blooming second year from seed, known also as the Hardy Larkspur. The plants are of vigorous habit, with large flowers on spikes two feet long, when well grown. Colors run from pale lavender to deep blue. This stock improved for 1929. Pkt., 25c.

LONG'S Still Better Delphiniums

Mr. Waller, the originator, says: "When all these colors are in bloom—red, chrome, pink, copper-red, claret, purple,—it makes you think of a beautiful Persian rug."

New California Poppies

"Persian Rug" Mixture

Mr. Waller, the originator, says: "When all these colors are in bloom—red, chrome, pink, copper-red, claret, purple,—it makes you think of a beautiful Persian rug."

F09. "Persian Rug" Mixture. Pkt., 10c; ¼ oz., 50c.

Double Annual Chrysanthemum

F011. Not the large kind grown in green-houses and so much in evidence at football games, but a smaller flowered variety that blooms in the open garden from seed sown in spring. Nice for garden display and good for cutting. Most of the flowers come double. Mixed colors. Pkt., 10c; ¼ oz., 25c.

Japanese Morning Glory

F72. Colors run from white through all shades of blue and red; from palest pink to darkest reds and purples. Many flowers streaked, mottled and bordered. The leaves are also very ornamental, ivy-like and heart-shaped, green and marbled. Climbers. Plant in warm location. Pkt., 10c; oz., 30c.

LONG'S Ageratum (Floss Flower)

Dwarf, compact plants, fine for borders, edgings or pots.

F1, Blue; F2, White; F3, Choice Mixed. Price for any kind: Pkt., 5c; ¼ oz., 25c.

LONG'S Sweet Alyssum

Exceedingly popular border plant, useful in many ways in any garden. Puts the "finishing touch" to beds, walks, etc. Snow white; comes quickly from seed, and blooms continuously.

F4. LITTLE DORRIT. Similar to Little Gem but still more compact and a finer variety. Pkt., 10c; ¼ oz., 25c; ½ oz., 40c.

F4½. LILAC ALYSSUM. Same as white, but lilac color. Pkt., 10c.

LONG'S Amaranthus

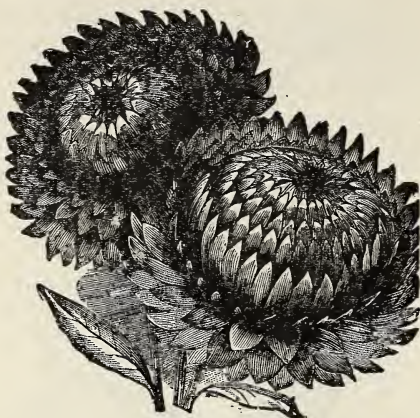
Graceful plants with ornamental foliage producing a striking effect as a background or centerpiece.

F5. All Kinds, Mixed. Pkt., 5c; ½ oz., 15c.

LONG'S Antirrhinum (Snapdragon)

F7. LONG'S SPECIAL MIXTURE. Largest and finest kinds in rare variety of colors, for cut flowers or garden display. Pkt., 10c.

Separate Colors Snapdragon. White, Pink, Yellow, Red. Any color, Pkt., 10c.



LONG'S Everlasting Flower

Very ornamental in garden, easily grown from seed sown outdoors. Particularly valuable for winter decoration of vases and everlasting bouquets. Will really keep for years. May be washed with soap and water to brighten up. An old-fashioned flower that is "coming back" strong now.

Important. Cut the flowers when partly open just as shown in this picture. Don't put them in water but hang them up dry in dark. Place also some on shelf in dark closet, so blossoms and part of stem hang over edge of shelf. This gives curve and charm to the stems when placed in vase.

Golden Globe. Large, golden yellow.

Silver Globe. Chaste silvery-white.

Rose-Carmine. Shades of rose.

"Christmas Red." Very popular for Christmas decorations. Some florists and gardeners make a bunch of money selling this at Christmas time.

All Kinds Mixed. These and other colors all in one mixture.

Prices: Any color, or all mixed: Pkt., 10c; 3 for 25c.

LONG'S Scotch Marigolds

(Calendula.) Also called Pot Marigold. Grows readily from seed planted outdoors. May also be grown in pots indoors. It blooms continuously if kept picked.

Orange King. Florists' strain. Enormous orange flowers, perfectly double.

Lemon Queen. Like Orange King but clear lemon-yellow. Double.

Nankeen. Large double cream flowers slightly flushed apricot. Unique.

Prices: Any these three fine kinds: Pkt., 10c; 3 for 25c.

F13. MIXED CALENDULA. Pkt., 5c; ½ oz., 20c.

Annual Mallow (Lavatera)

F015. A showy annual, about 2 feet high, producing large cup shaped shrimp-pink flowers. Sow in May and thin to 10 inches. Pkt., 10c; ¼ oz., 25c.



Alyssum



Snap Dragon



Canterbury Bell



Four o'Clock

LONG'S Bachelor's Button

DOUBLE BACHELOR BUTTON. Superior to the old single type. FO½ White. F01 Blue, F02 Rose, F03 Mixed—all at 10c pkt.

F8. SINGLE MIXED. Pkt., 5c; ½ oz., 20c.

LONG'S Balloon Vine

F9. Hardy annual climber, producing white flowers and seed vessels that look like small balloons. Good for screens. Seeds hard and should be soaked 24 hours. Pkt., 5c; ½ oz., 15c.

LONG'S Balsam (Lady Slipper)

Grows quickly from seed, producing large brilliant flowers. Also called "Touch-Me-Not." Great favorite with children.

F11. DOUBLE MIXED. Pkt., 5c; ½ oz., 25c.

LONG'S Calliopsis

F14. Bush plants 2 feet high covered with showy flowers. Pkt., 5c; ½ oz., 15c.

CALIFORNIA POPPY (See Eschscholtzia)

LONG'S Canary Bird Flower

F15. Rapid growing climber, 10 feet. Flowers canary yellow, and resembling a canary bird. Fine for porches, etc. Soak 24 hours. Pkt., 10c; ½ oz., 20c.

LONG'S Candytuft

F17, PURE WHITE; F18, FINE MIXED. Pkt., 5c; oz., 25c.

GIANT HYACINTH-FLOWERED. New. Extra large and fine. Pkt., 10c.

LONG'S Canterbury Bells

Hardy biennials, blooming second year from seed. Plants 3 feet high. Flowers bell shaped, and many colors. Very showy. Sow from May to August.

F19. LONG'S SPECIAL MIXTURE. Single, double, and "cup and saucer" varieties; all mixed; very fine. Pkt., 10c.

LONG'S Hardy Carnations

Biennials. These lovely fragrant carnations are the most profuse bloomers of all the so-called pinks.

F20. MARGARET. Double flowers with lovely fringed petals; delightfully fragrant; wide range of charming colors. Extra fine. Pkt., 10c; ¼ oz., 35c.

LONG'S Celosia or Coxcomb

F22. OSTRICH PLUME. Feathered varieties mixed. Pkt., 5c; ¼ oz., 25c.

F23. CRESTED COXCOMB. Dwarf plants with bright red combs. Pkt., 10c.

LONG'S Cobaea Scandens

(Cathedral Bells)

F24. Rapid growing climber, 15 to 20 feet in a few months. Has lovely lilac bell shaped flowers. Plant seeds on edge. Pinching few inches off top of plant when 6 inches high or so will make it branch out and produce denser covering. Pkt., 10c; ½ oz., 25c.

LONG'S Columbines (Aquilegia)

Early blooming hardy perennial with graceful long spurred flowers. Very showy.

F25. TRUE ROCKY MOUNTAIN COLUMBINE. The Colorado State flower, and most popular of all columbines. White center with blue petals. Pkt., 10c; ¼ oz., 35c; ½ oz., 60c; oz., \$1.10.

F26. MIXED COLUMBINES. Good variety of colors. Single and double mixed. Pkt., 10c.

LONG'S Early Giant Cosmos

Heretofore it has been necessary to list two strains of cosmos, the early with small flowers, and the late or giant flowering. This early strain is also large flowering.

F27, WHITE; F28, PINK; F29, CRIMSON;

F30, FINE MIXED. Your choice of any of these colors, or mixed: Pkt., 10c; ½ oz., 25c.

LONG'S Cypress Vine

F31. Beautiful rapid growing climber with feathery foliage and star-shaped blossoms. Soak seed 24 hours in warm water. Pkt., 10c; ½ oz., 25c.

LONG'S Double Daisy

The poet's favorite flower, perennial, blooming first year from seed. Very neat for borders.

F32 PINK; F33 WHITE; F34 MIXED. Price for either color or mixed: Pkt., 10c.

LONG'S Shasta Daisy

F35. SHASTA DAISY. Originated by Burbank. Large white flowers on long stiff stems, great bloomer, fine for cutting, perennial; roots may be divided after a few years and reset. Pkt., 10c.



California Poppy



Carnation



Cobaea Scandens



Celosia

LONG'S California Poppies

Blooms early and continuously from spring sown seed. Seeds itself after first year. Fine for beds or borders.

F36. GOLDEN WEST. Large golden yellow; the California State flower. Pkt., 5c; ½ oz., 25c.

F38. LONG'S BRILLIANT MIXTURE, of best kinds and colors. An unusually bright and pleasing mixture. Pkt., 5c; ½ oz., 25c.

LONG'S "Forget-Me-Not"

F32. Hardy perennial and one of the daintiest of garden favorites. Blooms first year and better next. Color blue. Pkt., 10c; ¼ oz., 25c.

LONG'S Four o'Clock

F39. Good old-fashioned easy-to-raise flower, splendid for hedge center or background. Mixed colors. Pkt., 5c; oz., 20c.

LONG'S Fox Glove

F40. Tall perennial with spikes of varicolored and spotted tube-like flowers, blooming second-year from seed. Pkt., 10c.

LONG'S Gaillardia

F41. Compact bushy plant bearing large brilliant flowers. Fine mixed. Pkt., 5c; ¼ oz., 25c.

LONG'S Geranium

F43. Perennial, blooming first year from seed if started early. Fine mixed. Pkt., 15c.

F033. GRAND ZONALE. Mixed. Pkt., 25c.

LONG'S "Satin Flower" (Godetia)

F43. Hardy annual about 18 inches tall, bearing many showy flowers of satiny texture in rich and varied colors. Does well in poor soil and somewhat shady places. Fine mixed, Pkt., 5c; ¼ oz., 15c.

LONG'S Curious Gourds

Don't overlook these for the children. Easily grown, rapid climbers, tender, sow after danger from frosts.

F44. NEST EGG. Grow your own nest eggs. Give the hen an inspiration. Plant this seed in poor soil lest you raise an ostrich egg. Pkt., 5c; ½ oz., 15c.

F45. DIPPEE. Dippers are now so high that it might pay to grow your own dippers and be independent of the dipper trust. Pkt., 5c; ½ oz., 15c.

F46. MIXED GOURDS. Ornamental gourds, large and small, all shapes and colors. Many odd, fantastic varieties. Pkt., 5c; ½ oz., 25c.

LONG'S Gypsophila

Graceful plants of light fairy-like growth, covered with tiny white flowers. In great demand for combining with sweet peas and other cut flowers. Note that there are two kinds, the annual and perennial.

F47. ELEGANS (ANGEL'S BREATH) ANNUAL. Blooms first year from seed. Not so dainty as the perennial. Good plan to sow both kinds this spring, so as to have a supply this year and next. Pkt., 5c; oz., 25c. **F47½.** Same as F47 above, but dainty pink. Annual. Pkt., 10c.

F48. PANICULATA (BABY'S BREATH) PERENNIAL. Blooms second year from seed and increases in size of plants each year. The tiny white flowers on branched stems are so thick as to give the plant a white lacelike effect. A "perfect dream". Pkt., 10c; ½ oz., 25c.

F049. DOUBLE GYPSOPHILA. New. This comes part semi-double and single. About one-fourth comes double. Perennial. Color white. Pkt., 25c.

LONG'S Heliotrope

F50. Perennial, blooming first year from seed. Choice mixed. Pkt., 10c.

LONG'S Double Hollyhocks

The modern double hollyhocks bear flowers as double and beautiful as the most charming rose. My double varieties in seed and plants are of the finest. Biennial.

F51. Extra fine mixture of double flowering kinds. Pkt., 10c; ¼ oz., 25c.

SEPARATE COLORS DOUBLE HOLLYHOCKS: **F51** Sunset. **F52** White. **F53** Yellow. **F54** Red. **F55** Pink. **F57** Maroon. **F58** Black. Choice of colors. Pkt., 10c; ¼ oz., 40c.

F56. NEW LILAC DOUBLE HOLLYHOCK. Something different, and pleasing, for your garden. Pkt., 10c; ¼ oz., 40c.

F59. SINGLE HOLLYHOCKS. Mixed. Pkt., 5c. See Plant Pages for Hollyhock Roots.

LONG'S "Job's Tears"

F61. Curious ornamental grass with hard seeds used for beads. Pkt., 10c; ¼ lb., 25c.

LONG'S Japanese Hop

F62. A rapid growing climbing vine much used for covering unsightly objects and for shading windows and porches. Soak seed 24 hours. Pkt., 10c; ½ oz., 25c.



Mixed Gourds



Gypsophila



Japanese Hop



Marigold

Long's Annual Larkspur

- F63.** Dwarf Mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.
F64. Tall Mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

Long's Scarlet Flax

- F65.** Slender plant with bright red saucer-shaped flowers. Very showy and easy to grow. Pkt., 5c; oz., 25c.

Long's Marigolds

- F67.** FRENCH DWARF. Mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.
F67½. "LEGION OF HONOR." Rich golden yellow flowers, marked velvety brown. Fine for borders and edging. Pkt., 10c; $\frac{1}{2}$ oz., 30c.
F68. AFRICAN TALL. Long's Special Mixture of large beauties. Pkt., 10c; $\frac{1}{2}$ oz., 30c.

Long's Mignonette

No garden is complete without this old-fashioned fragrant flower. Comes into bloom soon.

- F69.** LONG'S SPECIAL MIXTURE. Extra fine varieties mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

Long's Morning Glories

- F70. TALL.** Always popular for fences and screens, etc. Fine mixed. Pkt., 5c; oz., 20c.
F71. DWARF. Good for beds or borders. Pkt., 5c; oz., 25c.

Long's Mexican Fire Bush

- F73.** Also called Summer Cypress. The moss-like green foliage turns to deep carmine in fall. Makes inexpensive showy edge. Improved giant strain. Pkt., 10c; $\frac{1}{2}$ oz., 25c.

Long's Scabiosa

- F74.** Also known as Pincushion Plant. Flower stems are long and keep well in water. Fine mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

Long's Nicotiana

(Flowering Tobacco Plant)

- F75.** Blossoms something like petunia but with longer tubes. Flowers very fragrant and showy. Pkt., 5c; $\frac{1}{4}$ oz., 25c.

Long's Delightful Petunias

Great bloomer. Very showy and fragrant. My Giants of California are simply marvelous in size, forms and colors.

- F83. CHOICE MIXED.** Splendid mixture of single varieties. Pkt., 10c; $\frac{1}{4}$ oz., 35c.
F89. GIANTS OF CALIFORNIA. Extra large flowers of every conceivable shade. Many blossoms ruffled. Truly wonderful. Pkt., 25c.

Long's Nasturtiums (Dwarf)

About one foot high and very effective. They bloom and bloom and bloom. The more you pick them the more they bloom. Fine for beds and borders, also for planting in rings around trees. Stand hot locations better than many other flowers. Easy to raise. Tramp soil after planting so it will come in contact with all portions of the ribbed seed. Soaking seed 24 hours will also hasten germination. Sow any time from first of April to July.

- F76. LONG'S SPECIAL MIXTURE.** Extra fine mixture of Dwarf sorts, always giving pleasing results. Large Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Separate Colors Dwarf Nasturtiums

- F77. EMPRESS OF INDIA.** Crimson. Foliage dark.
F78. GOLDEN KING. Rich orange-yellow.
F79. KING THEODORE. Velvety crimson.
F80.1 PEARL. Light lemon-yellow or primrose.
F81. VESUVIUS. Rich deep apricot.
 Any separate color: Pkt., 10c; oz., 20c.

Long's Nasturtiums (Tall)

Fine for covering trellises, stumps, fences, etc. Very showy when planted at top of steep bank and allowed to run down the bank. Or may be allowed to ramble in any location. Flowers larger and stems longer than the dwarf kinds.

- F82. LONG'S SPECIAL MIXTURE.** Fine assortment of large flowering tall or climbing nasturtiums. Large Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Separate Colors Tall Nasturtiums

- F83. KING THEODORE.** Crimson-maroon.
F84. BOSE. Bright soft rose.
F85. SCARLET. Bright scarlet.
F86. SUNLIGHT. Clear rich yellow.
F87. VESUVIUS. Salmon-rose.
 Any separate color: Pkt., 10c; oz., 20c.

Long's Phlox Drummondii

For beds and massing nothing surpasses these beautiful annuals.

- F91. GRANDIFLORA MIXED.** Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Long's Pinks (Dianthus)

Hardy sweet scented annuals blooming all summer in variety of brilliant colors.

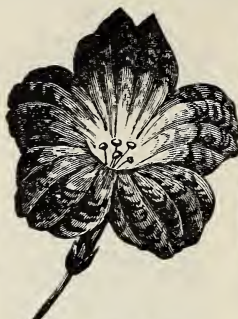
- F94. HEDDEWIGGII.** Finest of all pinks. Great variety of colors. Pkt., 10c; $\frac{1}{4}$ oz., 50c.



Morning Glory



Pink



Salpiglossis



Verbena

LONG'S Gorgeous Poppies

Wonderfully brilliant and always popular flowers. Sow where wanted, as difficult to transplant.

F94½. BRILLIANT BEAUTIES. My special mixture of finest double and other charming sorts in wide range of colors. Pkt., 5c; ½ oz., 25c.

F95. TULIP POPPY. Vivid scarlet. Pkt., 10c; ¼ oz., 35c.

F96. SHIRLEY. A beautiful single poppy, white, pink, lavender, purple, crimson, all mixed. Pkt., 5c; ¼ oz., 25c.

F96½. ICELAND. (Perennial.) Very hardy, fragrant, blooms first year from seed, good for cutting. Fine mixed. Pkt., 10c; ½ oz., 25c.

F97. ORIENTAL. (Perennial.) Tall and showy. Scarlet flowers. Looks well among shrubs. Pkt., 10c; ½ oz., 25c.

LONG'S Castor Beans

F98. Tropical looking plants growing to immense size from seed soon after danger from frost. Richer the ground the bigger they grow. Good for backgrounds and centerpieces. Children enjoy seeing them grow so quickly to size of trees 6, 8, or 10 feet tall. Pkt., 10c; oz., 25c.

LONG'S Portulaca

(Moss Rose)

F99. SINGLE MIXED. Pkt., 5c; ¼ oz., 25c.

F100. FINE DOUBLE MIXED. Pkt., 10c.

LONG'S Velvet Trumpet

Salpiglossis

F101. Very showy plant with trumpet-shaped blossoms in rare combinations of color, beautifully marbled and penciled. Pkt., 10c.

LONG'S Salvia (Scarlet Sage)

F102. Standard bedding plant where brightness of color is wanted. Flowers borne in spikes of fiery red lasting long time. Pkt., 10c.

LONG'S "Hit or Miss"

F125. Great mixture of many kinds flower seeds—as one customer said, "It's all hit and no miss." Something new nearly every day after begins to bloom. Makes a good hit with all who try it. Pkt., 5c.

LONG'S Double Sunflower

F105. The grandest of all sunflowers, 7 feet high, with a dozen or more blossoms on each stalk. Flowers perfectly double, resembling chrysanthemums, and of a rich golden yellow color. Perfectly gorgeous for centerpiece or background, very hardy, easily grown from seed. Pkt., 10c; oz., 25c.

LONG'S New Red Sunflower

F106. Originated here in Boulder. Valuable as a novelty only. Does not come all red. More brown than red, some flowers other colors, as color not yet fixed. Many of the combinations of colors are as interesting as the real red. Pkt., 10c; ½ oz., 25c.

LONG'S Stocks—Ten Weeks

103½. "Cut and come again" fragrant annual. Profuse bloomer. Colors range through all the soft and distinct shades. Pkt., 10c.

LONG'S Sweet Sultan

F107. Delightfully fragrant flowers with small fringed petals. Easily grown. Something like Bachelor's Button. Choice mixed. Pkt., 5c; ¼ oz., 15c.

LONG'S Sweet William

Well-known hardy perennial producing gorgeously colored fragrant flowers.

F108. SINGLE MIXED. Pkt., 5c; ¼ oz., 15c.

F109. DOUBLE MIXED. Pkt., 10c; ¼ oz., 35c.

LONG'S Verbenas

F110. MAMMOTH MIXED. Also, Red, White, Purple, or Pink. Your choice, Pkt., 10c.

LONG'S Wild Cucumber

F115. One of the quickest growing annuals, 30 feet in a season sometimes. Foliage dense, great for shade. Produces many white blossoms, followed by ornamental prickly seed pods. Will self row after first season. Soak seed in warm water 24 hours, or cut small portion of shell away from germ end (the pointed end). Pkt., 10c; oz., 25c.

Dahlia Sweet Heart's Bouquet

D36. Another famous dahlia, "Made in Colorado" by my good friend Wilmore, the oldest dahlia specialist in America.

Color, unique shading of salmon-rose, tinged with fawn; is pleasing alike in both day and artificial light.

A perfect flower of the popular peony type, much larger than this illustration; stems extra long and wiry, holding the flowers up well. One of the earliest. Blooms all season. **SPECIAL PRICE: 40c.**



You Can Originate New Dahlias from Seed

New dahlias all come from seed. Dahlia tubers come true and do not mix, but seed will produce various types and colors, probably all different from the kind that supplied the seed. There seems to be no law or rule governing this. They seem to come just as they please. That's what makes it interesting and also gives the amateur a chance to originate new dahlias of merit.

Where space is limited, it is desirable to plant tubers of a few real good kinds. But if one has more room, then it is indeed worth while to grow some from seed also. Not all from seed will be prize winners. so the usual method is to grow quite a number, then in the fall select your favorites, saving the tubers for next year.

This is the method followed by dahlia specialists. They grow hundreds and thousands from seed, then select only a few that show unusual merit. These are saved, named, and stock increased until enough on hand to offer at fancy prices. You, too, can name your own new dahlias. Some name them for members of their families, or friends. Splendid idea.

As there are no two people just alike, so there are peculiarities and individualities that make these dahlias of yours, grown from seed, different from others. This adds much interest to growing dahlias from seed.

Sow the seed out in the garden after ground warms up or start indoors and transplant. Protect plants from frosts. Dahlias from seed will nearly all blossom even from outdoor planting, and almost as soon as those from tubers.

Long's Special Mixture. A good mixture, same as I've offered for several years. Will produce many fine flowers, and some grand new ones well worth saving and naming. Pkt., 25c; 5 pkts., \$1.00.

Long's Professional Mixture. Seed saved from only the newer and finer, expensive varieties. Should produce a larger per cent of extra fine kinds, though we never can tell. Same as I myself shall use, hoping to get a few rare beauties. Pkt., \$1.00.

Note. Dahlias from seed come mostly peony flowered or decorative, the most popular types.

TO KEEP DAHLIAS HEALTHY:—Dahlias are seldom troubled with pests, but watch your plants closely. If the leaves turn brownish, or curl, or if the buds seem to blast, spray the plants well several times with some tobacco solution or kerosene emulsion. Chances are that aphids, lice or tiny red spiders are at work. See suggestions regarding use of contact spray. Dashing plants frequently with water from hose will also help some. I use Black Leaf 40, Tobacco Soap, Aphitox or Hall's Nicotine. But don't wait too long—do the pest before they do the plants.



Immense Dahlia, "Champagne"—Shown on Front Cover Page

Through the courtesy of the Tacoma, Wash., chamber of commerce, is shown on opposite page a basket of Champagne dahlias that won first prize at the Western Washington Fair at Puyallup. The dahlias were grown by Mrs. Herman J. Schroeder of Tacoma. The young lady standing by the vase is Miss Evelyn Gunderson.

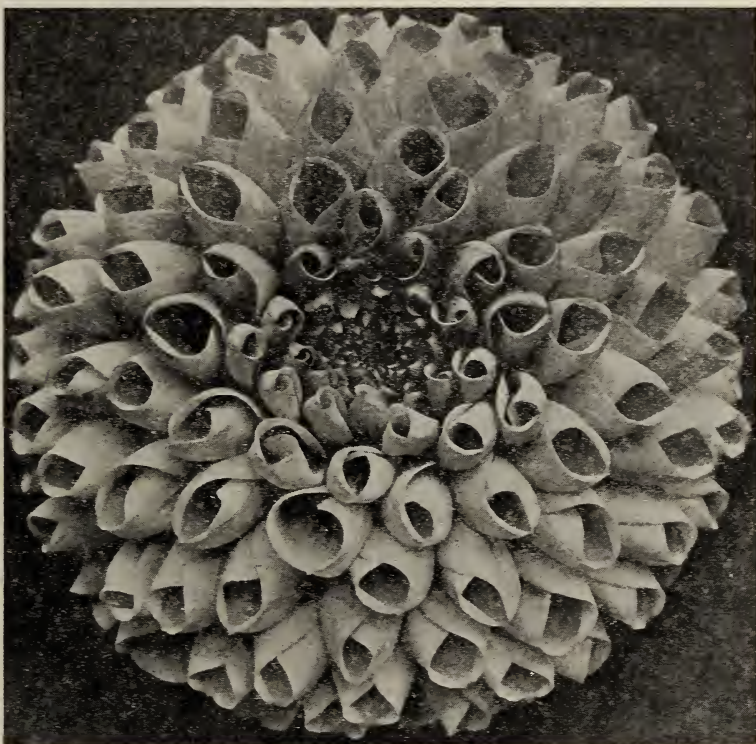
D28. CHAMPAGNE. Not only is the dahlia remarkable for its size and rigid stem, but its unusual coloring makes it very popular. The color varies in autumn shades from burnished copper to a dull golden champagne and chamois. The stem is exceptionally long and strong and holds the massive flower absolutely upright high above the plant. Tubers, \$1.00 each, prepaid.

UNIQUE QUILLED DAHLIA "GERO'S PINK"

D31. A seedling of the well known "quilled" dahlia, Grand Duke Alexis, resembling its parent in form but color a rich pink.

The plant is a rank and healthy grower and blooms with good stems for cutting. Each, 50c.

This illustration will also help you to visualize the following other dahlias of the quilled show type, D. M. Moore, Deelightened, Helen Hollis, and the little "Pompons".



A Few Dahlia Pointers

Dahlia bulbs or tubers are similar to potatoes and should not be set out until about May 1st. Be sure to divide the clumps of last year, leaving a portion of the base of stem on each tuber, for it is at this part of the clump that the eyes are located, and each tuber must have an eye to grow. One eye is sufficient, and the size of the tuber is immaterial. Better divide and throw away part of the clump than plant it as lifted last fall. Still better, give some of the surplus tubers to some one who will appreciate them. Lay Dahlia tubers flat, rather than perpendicular, when planting. Cover four or five inches. See also, page 53.

How to Keep Dahlia Blossoms

Burning the cut end of dahlia stems or holding them in boiling water a few minutes is a common practice, to keep them from wilting. Whether you do this or not, try this also: Soon as cut, hold the blooms under cold water faucet, letting the water run on the backs of the blossoms especially. Gently shake excess water off the flowers. Then several times a day spray the backs of the dahlia blooms with cold water. This can be done with a small sprayer, or by dashing a little water with the hand. Or, take the flowers out and let more water run over them. Do a little experimenting and you will make some pleasing discoveries.

See Page 53 for Suggestions on Growing Dahlias

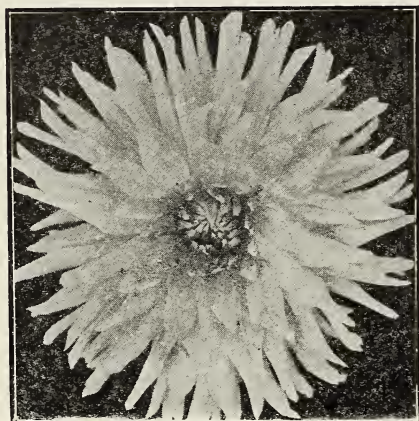
LONG'S Delightful Dahlias—Many Prices Reduced, 1929

Prices Really Reduced. In two ways. One is a positive reduction for single tubers of many of the most popular dahlias of today. As you will note, quite a number that sold at 75c to 90c each last season can now be had at 50c to 60c.

Regarding Types or Shapes of Dahlias

There are five main divisions or classes in my list: Cactus, Hybrid-Cactus, Decorative, Peony, and Show. **Cactus** is well shown in illustration of Golden West. Some cactus dahlias have sharper pointed petals than this. If petals are not so sharp pointed, then the dahlia is classed as a **hybrid-cactus**, being between a real cactus and a decorative type. The **decorative** type is shown in illustration of "Andy Guro". The **peony** type or form is well shown in illustration of Sweetheart's Bouquet. The **show** type is more of a full, double, ball-shaped form, as seen in illustration of Gero's Pink.

(Prices are for single tubers. Each tuber makes large plant.)



Golden West (Size Reduced) ¼

D13. EL GRANADA. (Hybrid-Decorative.) Vivid orange with creamy white tips. Petals twist and interlace giving the blossoms a very artistic form. Long stems. \$2.00.

D15. MARIPOSA. (Hybrid-Cactus.) Beautiful pink, shading darker at center, with violet suffusion. Gigantic flower of great depth and perfect form, with incurved petals. \$1.00.

D16. GOLDEN WEST. (Cactus.) Golden yellow shading to clear yellow in center. 45c.

D17. "DEE-LIGHTED". (Show.) Pure white. Probably the largest of all show dahlias. 35c.

D18. SHENANDOAH. (Dec.) Rich wine colored flowers of gigantic size on long stems. A new dahlia that makes visitors "Ah!" and "Oh!" \$2.00.

D19. ORIOLE. (Peony.) Combination of burnt orange, red and yellow, with many petals tipped white. 50c.

D22. JERSEY'S BEAUTY. (Dec.) Fine true rose-pink. Splendid flowers borne on long strong stems. A real beauty. 90c.

D23. TRENTONIAN. (Dec.) Color a blending of old gold, amber and bronze with center zone of reddish bronze. A giant of the first order. \$1.50.

D24. DADDY BUTLER. (Hybrid-Cactus.) Rose-carmine; reverse side of petals lighter. Profuse bloomer and good keeper when cut. 60c.

D25. ELSIE OLIVER. (Hybrid Cactus.) Large creamy pink. 50c.

D26. BOOKWOOD. (Dec.) Bright cerise-rose without any touch of magneta. Large. \$1.80.

D27. CHAS. STRATTON. (Dec.) Pale gold shaded and tipped rose-red. Immense blossoms. \$2.00.

D28. CHAMPAGNE. (Dec.) Golden champagne with chamois shadings. A wonderful dahlia on account of its distinct coloring, unique form, immense size and strong stems. \$1.00.

D29. ELLINOR VANDERVEER. (Dec.) Glowing satiny rose-pink with darker shadings of great depth. Very large. \$1.00.

D30. RADIO. (Dec.) Blood-red, edged and tipped with yellow. One of the largest dahlias to date. \$1.50.

D31. GERO'S PINK. (Show.) Rich pink, beautifully quilled. 50c.

D33. BRIDE'S BOUQUET. (Cactus.) An ideal white for cutting. Flowers medium size; stems long and erect. A free bloomer. 50c.

D36. SWEETHEART'S BOUQUET. (See page 17.) 40c.

D37. LIBERTY BOND. (Dec.) Rich apricot. Immense flowers on long strong stems. 50c.

D2. BASHFUL GIANT. (Dec.) One of the largest dahlias introduced. The immense blooms are excellent for exhibition, the color is apricot with golden shadings. 75c.

D3. BETHEL'S BEAUTY. (Dec.) Color is deep lilac blue, the nearest approach to blue that we have seen in a dahlia. Fine. \$2.

D5. DELICE. (Dec.) Rose pink. One of the best for cutting. 25c.

D7. D. M. MOORE. (Show.) Deep velvety maroon. Gigantic blossoms, too heavy for stem. Not very good for cutting. But a favorite for garden show. 30c.

D8. ELLINOR VANDERVEER. (Dec.) Similar in type to I. de ver Warner, this new variety is even larger, and a beautiful shade of true light pink. Clean vigorous plants of erect habit, holding flowers high on perfect stems. Sensation wherever grown. \$1.

D9. GOLDEN OPPORTUNITY. (Show.) Rich buttercup-yellow, shaded orange. 45c.

D10. MRS. C. D. ANDERSON. (Show.) Rich purple. 45c.

D11. AVALON. (Dec.) Pure, clear yellow. Very large and full to the center. Although so large, it is excellent for cutting. R. T. Davis, well-known Colorado dahlia grower and florist, says he considers this the best yellow decorative for cutting. \$1.00.

D12. EMPEROR. (Dec.) Beautiful deep maroon of the finest type; flower is made up of long flat petals; the color does not spot under any conditions. It is a magnificent dahlia of the highest merit. 50c.

D52. MRS. CARL SALBACH. (Dec.) Soft lavender-pink. Remarkable stems. Extra fine for cutting. 40c.

D53. JERSEY'S BEACON. (Dec.) A decided novelty of Chinese scarlet with a paler reverse, giving a two-toned effect. An exhibition flower of vigorous growth, excellent stem. \$2.00.

D55. WILLIAM G. (Dec.) A mammoth flower of shaggy form. Could be classed as Hybrid Cactus. Plant of sturdy well-branched habit. Flowers of excellent keeping qualities. Color, rich henna shades. A wonderful flower. \$2.00.

D58. NINFEA (Water Lily). (Cactus.) Soft lavender-pink shading to creamy white in center. Its broad upturned petals resemble a water lily. \$1.00.

D62. PRIDE OF CALIFORNIA. (Dec.) Similar to Andy Gump but not so large, tall and fine. 50c.

D64. MILLIONAIRE. (Dec.) Delicate lavender with a faint pink cast overshadowing it, shading to almost white in center. One of the largest dahlias grown. 50c.

D66. J. D. LONG. (Dec.) Flowers are always full and well-formed. Stems long and rigid, holding the flowers erect. Color, a blending of autumn tints of salmon-pink, amber and bronze. 75c.

D81. ROSA NELL. (Dec.) Pure, bright rose, so rich, strong and rare that it stands alone. Immense flowers. Often called "The 100% Dahlia", because of its many good qualities. 50c.

D83. JUDGE MAREAN. (Dec.) Combination of glowing salmon-pink, iridescent orange, yellow and gold, all blending most beautifully. 50c.

G97. MRS. IDA DE VER WARNER. (Dec.) Exquisite soft orchid or rosy mauve. Although very large it is splendid for cutting and exhibition purposes. Should be in every collection. 50c.

D98. EL JEBEL. (Hybrid Cactus.) Combination of scarlet and gold, shaded to amber-yellow. The long narrow petals are fascinatingly curved and twisted. Very brilliant. 60c.

D99. RUTH JACQUELINE. (Cactus.) Beautiful canary-yellow. Flowers large and gracefully formed, and are held erect on stiff stems of excellent length. This is one of the dahlias that looks you right in the eye. 75c.

D101. EARL WILLIAMS. (Dec.) An exceptionally attractive variegated dahlia of large size. Supposed to be brilliant scarlet, with petals tipped white. But it does not come this way always. Often the flowers have as much white as scarlet on same plant with all red or part white and part red. But no matter how the colors are placed or blended the flowers are very unique and pleasing anyhow. 75c.

D117. AMUN RA, or "SUN GOD". (Dec.) A sensational decorative dahlia of immense size. Outer petals gorgeous copper and orange tones, shaded to gold and amber, deepening in the center to a dark reddish-brown, the effect being that of a glorious sunset. 70c.

D118. SUNNY CALIFORNIA. (Dec.) An attractive large flower with long, stiff stem. Old gold with darker shadings of orange red. A fine variety. \$1.00.

D119. WASHINGTON CITY. (Cactus.) Very large pure white cactus with star-like flowers on long, stiff stems. A splendid white. Each, 50c.

D121. ANDY GUMP. (Dec.) The very tall splendid red, dahlia held up high on long, straight, stiff stem. \$1.00.

D124. HELEN HOLLIS. (Show.) Beautifully quilled type, like Gero's Pink, but bright red. Large. 40c.

Cute Little "Pompon" Dahlias

Very popular. They are of the Show type (see illustration of Gero's Pink dahlia), but blossoms not over 2 inches in diameter. Splendid for cutting, lasting for days—much longer than other dahlias, when cut. Plants 3 to 4 feet high, and prolific bloomers.

D41. NERISSA. Fine rose-pink. 30c.

D42. ACHILLES. Lavender, tinted lilac. 30c.

D43. BACCUS. Clear bright red. 30c.

D44. CATHERINE. Bright yellow. 30c.

D45. CLARA HARSH. Yellow, tipped crimson. 30c.

D48. PURITY. Pure white; fine form. 30c.
Any 6 or more at 25c each.

Lost Label Dahlia Assortments

Made up from stocks that have lost their labels, also other lots of which we have too few to list, as well as from surplus quantities not less than 50c each, as usually sold. **Prices:** 3 for \$1.00; 7 for \$2.00; 15 for \$4.00, prepaid.

"Bristol Fairy," The New Double "Baby's Breath"

Every plant grown from cuttings, so comes true double. Color, white. Is a sort of "Cut and Come Again" strain, as keeps blooming for long time. Roots were started in greenhouse, then grown one season in field. Each, \$1.35; 2 for \$2.50; 4 for \$4.50, prepaid.

A Hobby for Pleasure and Profit

In spite of all that's been said, there are many who have yet to know the pleasure, the big kick, one can have growing some of the newer and finer sorts of flowers.

The dahlia has often been called "A Man's Flower". Men seem to vie with each other trying to see who can grow the biggest and most gorgeous or the most beautiful dahlias. The gladiolus is another flower exceedingly popular with men as well as with the whole family. That's the fine thing about growing flowers or raising a splendid back yard vegetable garden. The whole family can ride this sort of hobby, whereas they can not share Dad's recreation and pleasure in some other outdoor sports.

Often this gardening hobby develops into a business, either as a side line, or a full time profitable enterprise. But to get the most fun from a flower hobby one should **begin now**. Don't wait till you are full of years, with one foot in the grave and the other on a banana peel.



“Andy Gump”—Tall, Big Red Dahlia. You’ll Say It’s Well-Named!

D121. ANDY GUMP is a fine bright red decorative dahlia. The large blossoms are held well up above the foliage on extra long, strong stems. In fact, it was the long stem or “neck” supporting each blossom as well as the tall plant, that suggested the name to Mr. W. W. Wilmore, the originator. Fine for cutting. Tubers, each, \$1.00 prepaid.

A Remarkable Decorative Dahlia, “Mrs. Carl Salbach”

D52. The flowers, produced in great abundance, are large, and of perfect formation. Color, lovely shade of mallow pink. Stems extremely long and cane-like, holding these regal blooms erect above a tall vigorous plant. Has many medals, cups and other first prizes to its credit. A fine cut flower and most beautiful and stately in the garden. Special price, each, 40c; 3 for \$1.00, prepaid.

Gladiolus—The King of Flowers

Maybe you'll say it's the Dahlia, or some other flower that's King. All right, I'll not quarrel with you. But if the Gladiolus is not King, then it sure must be President, Prime Minister, Secretary of State, or some other notable.

Let's consider the Gladiolus. You who have grown it and become "Glad Fans" may run along and inspect the many fine varieties I'm displaying on the following pages. But if you've not already grown and fallen in love with "Glads" (that's what we call 'em for short—Glads), then please tarry a few moments while I tell some things that make this flower so popular and intensely interesting to grow.

Glads are so easy to grow that even if you don't have good "luck" with flowers, as a rule, you can hardly fail with Glads. It's worth quite a bit to start out with this feeling of success practically assured.

We grow these lovely flowers by planting bulbs, just about the same as we would plant onion sets—no more trouble to plant them than to plant the sets. The bulbs vary much in size, from as small as a large garden pea up to several inches in diameter.

The smallest bulbs are not supposed to bloom the first year, though some of them do. They are planted to grow nice large blooming size bulbs for next year. Growing and increasing Glad stocks from these small bulbs and still smaller bulblets, is another story and an interesting and profitable one. Just now we will talk about growing Glads from the blooming size bulbs—those that give us quick returns in flowers.

On another page (or, if crowded out, in a special folder I'll send when filling each Glad order) will be given detailed, helpful suggestions for planting the bulbs and caring for the growing crop, as well as taking care of the new crop of bulbs that you will harvest next fall.

And that's just one of the many remarkable and delightful points about Glads. You not only get your money's worth, and then some, the first year from the flowers, but when fall comes you are handed back not just as many bulbs as you planted, but still more, as a rule, with a lot of tiny bulblets hanging to the apron strings of the mother bulbs, for good measure.

Show me the fella who started that saying, "You can't eat your cake and keep it too"! I'll bet he never grew Glads. Just think of it! From the one investment you can grow and enjoy Glads for years. With care, you can increase the supply from year to year. Seems too good to be true, doesn't it? That's why buying Glad bulbs should not be considered an expense, but an investment. This idea could be carried further, of course, to prove that buying any sort of flower bulbs, plants and seeds, should not be considered an expense, for if growing flowers adds to your happiness and health, it isn't altogether an expense, to say the least.

Just what is there about Glads that make them so interesting and fascinating to grow? Sure, they're easy to grow, as I've said. That helps a lot. But that alone would not mean so much. Weeds are easy to grow. What counts is what you've got after you've grown 'em. That's where Glads shine.

Along in July you begin to get your first blooms. A medium size bulb will send up one spike, maybe two. A large bulb usually produces two or three, sometimes four spikes. A spike is the tall shoot that comes out of the leaves and unfurls a flag, so to speak, of blossoms.



—Photo by Hal Coulson.

Gladiolus, W. H. Phipps

The famous iridescent pink glad. This specimen was grown in my garden summer 1927 from a medium-size bulb. After the picture was taken the rest of the buds opened up perfectly. Not all spikes will be so large and fine, but many have been grown with longer spikes and more blossoms open at a time than shown here. Phipps has been well called "The Wonder Glad".

"Surprise Assortments"

Turn to back inside cover page for unusual offers in some of the best glads to be had now at moderate prices. You are going to be mighty pleased with results from "Surprise Assortments".

Not all the blossoms open at once. A few varieties, like Phipps and some others, will sometimes display all or nearly all the blossoms of a spike at one time. Usually the lower buds unfold, one after another, several a day, this going on up the spike until the topmost buds open. The whole performance lasts a week or ten days. With some varieties, as long as 18 or 20 days. Lower blossoms fade after a few days, as newer ones come out.

It is this gradual unfolding habit that makes the Glad such a satisfactory and profitable flower for florists. They use them by the millions annually. Literally millions of Glad bulbs are planted in greenhouses and forced to bloom during the winter, while millions more are grown by florists, as well as others who sell to florists, during the summer and fall.

The amazing thing about Glads as cut flowers is the fact that the spikes may be cut when the very first bud is partly open, or even before it unfolds at all. After that the spikes may be taken into the house where they will go right on with their schedule of blooming, as though left on the plant in the garden. Thus the garden—the cream of the garden, so to speak, can be transferred into the house, on the dining-table, in the sick-room, or to decorate a room or entire house. It is not unusual to have these cut spikes in bloom ten days or so indoors. All they ask is water, light and air.

But that's not all. Seems like the Glad has more good points than any other flower. When cut with first buds about to open, the spikes may be shipped hundreds, even thousands of miles, after which they will come forth smiling, and bloom splendidly. I'd like to tell of many long distance shipments I've made, but will yield the floor to one of my customers, Mr. G. W. Dickey, an enthusiastic Glad fan in National City, California, who has a bigger Glad story. Last summer Mr. Dickey mailed a bunch of Glads in bud to President and Mrs. Coolidge for "Lindbergh Day" in Washington, receiving a note of thanks from the White House, saying the Glads came through O. K., and were much appreciated. Now you tell one!

Although popular for years, the Glad is coming into favor more and more as people discover new ways of using it for garden display and as a cut flower. As I've mentioned, few flowers are so welcome in the sick-room, for it is a never-ending joy for the sick or convalescent to watch the buds unfold from day to day—to figure out just how long before the next flower will be full open, and to enjoy the beauty of the flowers individually and collectively. Having no odor or fragrance, the Glad can be enjoyed by many who could not endure some other flowers in a room.

Much could be said also about using more Glads for garden display. A long period of blooming can be had by planting different varieties, some blooming earlier than others. Also, by planting different size bulbs of same or different varieties. The larger bulbs bloom first, followed by blooms from the smaller bulbs. Then, too, many kinds send out additional spikes as side shoots. A few even produce good size spikes from the stump after the main spike has been cut. The Los Angeles is especially noted for this, having won the name, "The Cut-And-Come-Again Glad". Plant them in rows, colonies, clumps or masses. A nice way to use them around the house and lawn is to plant each color or kind separately in small groups. Often a bit of space around edges of shrubbery that can be utilized this way.

While Glads grown in mixtures are pleasing, yet your Glad joy motor will never hit on all six until you begin to plant named

varieties and learn to know each Glad by its own name, same as you know your best and closest friends.

There are today thousands of named Glads, no two just alike. And more being originated and introduced each year. Naturally, one inquires, "Just how long can this continue? Will not every conceivable color, combination of colors, type and form be brought forth ere long?" The answer is, "When there are so many people on earth that no further variation in appearance, habit, etc., is possible, then the limit shall have been reached in Glad origination."

However, out of these thousands, only a few hundred are of outstanding merit. Others will come and go. A few topnotchers are introduced each year, along with many kinds that are no better than the old favorites. Some not so good. It's my job, and the job of anyone who specializes in growing and selling fine Glads, to sort out the better kinds and discard the less desirable. In the following list you will find a number of the newer and better kinds that will be grown and highly prized long after many others are forgotten. All are good, but some are exceptionally good. If a few are rather too high in price this season for your Glad budget, just pass them up now but look forward to possessing them in another year or two when stocks become more plentiful and prices can then be reduced.

Now I could talk for hours—or pages—to you who have not yet grown Glads, and to others who have not experienced the joy of growing and knowing Glads by name, to enthrall you in this fascinating avocation. But I'm going to take a "short cut", in this way:

I'm going to offer you a very special COLLECTION of named varieties, each labeled, and price it so reasonably that you can begin this very year to grow and know named varieties. I can give you biggest value by making these Collections sorta elastic-like, both as to sizes of bulbs and the varieties I'll use in this Collection.

You see it's this way: I have plenty of bulbs to make up hundreds of Collections. But don't always have certain varieties or certain sizes of a variety. If you give me some "leeway" as to kinds and sizes, I'll sure send you your money's worth, and then some.

It occurs to me that a fitting name for this special lot would be DEMONSTRATION COLLECTION, because it will come right into your own garden and demonstrate or explain more fully what I've been trying to tell you. I'm starting you out with the less expensive kinds. Leave it to me to pick the winners from some of the more plentiful varieties. Later on, when you get the "bug" you will doubtless want some of the newer creations also. Yet there will be some rather new varieties also in these Collections—some surprises!

The bulbs in these "Demonstration Collections" will run various sizes from 3/4ths inch up, depending on what sizes I have in stock. Every bulb will be good blooming size. Good value guaranteed.

Demonstration Collection

15 bulbs, all different varieties, my selection, each kind labeled. Price for one assortment or Collection, \$2.00. Two of these Collections for \$3.60; three for \$5.00; five for \$7.00. All prepaid.

Each Collection worth \$2.50 or more. These 1929 Demonstration Collections will contain more of the better varieties than I've offered at any such prices before. If you were to select them from my list these bulbs would cost at least \$2.50 for each Collection.

LONG'S Gladiolus Bulbs—Splendid Named Varieties

The **Large Bulbs** will measure at least one inch in diameter. This size is designated by the "L". In some varieties, my "L" bulbs will measure 1½ inches or even more, in diameter. The general average will be all of 1¼ inches. Size will vary according to stock on hand, but real good value always assured, even if we have to send some extra count. (Often send extras anyhow, as my old customers well know.)

Medium Bulbs measure ¾ths of an inch in diameter or larger. I find these **Medium Bulbs** bloom nicely, though the large bulbs often make still larger spikes or more of them. **Medium Bulbs** are designated by letter "M".

Small Bulbs are designated by the letter "S". They will average about half inch in diameter, some larger, some a little smaller. Not sold as blooming sizes, yet many will bloom. This size is planted mainly for growing good blooming size bulbs for next year. It's an economical way to get started for next year, with smaller investment. But if you want fine spikes of blooms this year, buy the **Large** and **Medium** sizes.

It will help us in filling your Glad bulb orders if you will mention the size each time: Large, Medium, Small, or, just use the letters, **L., M., or S.**

6 Bulbs at Dozen Rate. By taking 6 or more bulbs of a kind and size you may figure at dozen rate. Often quite a saving to you.

If no dozen price named, multiply single price by 10.

For larger lots see wholesale pages.

Please do not order in smaller quantities than listed.

BALBOA. (Briggs.) Clear-glowing apricot pink, blending into a warm yellow throat. (**L.**, ea. \$1.00) (**M.**, ea. 50c) (**S.**, ea. 25c)

BECK, RITA. (Fischer)—Flowers of enormous size and excellent substance. Spike well built and strong, holding the well placed blossoms in best of form. Color medium pink. (**L.**, ea. \$2.00) (**M.**, ea. \$1.00) (**S.**, ea. 60c.)

BENGAL TIGER. (Pratt.) Mottled red. Odd. (**L.**, 4 for 30c; doz., 70c.)

BENNETT, DR. F. E. (Diener.) I believe it was Mr. Ellis who aptly described this flaming red Glad as "House A Fire Red." You'll say it's all of that. Large and fine. Good spike. Blooms from all size bulbs. (**L.**, ea. 20c; doz. \$1.80) (**M.**, 3 for 25c; doz. 90c) (**S.**, doz. 66c.)

BOBBY. (Kunderd.)—Deep rose, with red throat blotches. Very large. (**L.**, ea. 25c; doz. \$2.00) (**M.**, 3 for 25c; doz. 90c) (**S.**, doz. 60c.)

BREAK O'DAY. (Bill)—LaFrance pink, flushed over cream. Edges deeper pink. Zone of yellow on lower petals. Good size, very early. Blooms fine from medium and even small bulbs. (**M.**, 4 for 25c; doz. 70c) (**S.**, doz. 50c.)

BUNCE, ALLEN V. (Bill)—Vivid orange-yellow, with bright central line of claret. (**L.**, ea. 25c; doz. \$2.40) (**M.**, 2 for 25c; doz. \$1.20) (**S.**, doz. 70c.)

CARBONE, J. A. (Diener)—Iridescent orange-salmon. (**L.** 4 for 30c; doz., 70c.) (**M.** doz., 44c) (**S.**, doz. 30c.)

CARDINAL PRINCE. (Kunderd.) Rich red with good size blooms well faced on strong but not clumsy spike. Another splendid red. Darker than Dr. Bennett. (**L.**, ea. 30c; doz. \$2.50) (**M.**, 2 for 25c; doz. \$1.40) (**S.**, 3 for 25c; doz. 90c.)

CARTER, PATRICIA. (Kunderd.) Softest light shrimp-pink. No markings. The most beautiful Primulinus Glad ever offered by the originator. (**L.**, ea. \$1.00) (**M.**, ea., 60c) (**S.**, ea. 35c.)

CATALINA. (Briggs)—Bright rosy-pink with vivid lemon throat. (**L.** ea., \$1.00.) (**M.** ea., 50c.)

CHRIST, FREDERICK. (Diener)—Combination of LaFrance pink and yellow, said by the originator to be most wonderful color combination ever produced in Glads. Good, tall, straight spike with many blossoms open. (**L.** ea., \$8.00.) (**M.** ea., \$1.00.) (**S.** ea., \$2.50.) (**Bits.** 2 for \$1.00; 25 for \$10.00.)

COLEMAN, CATHERINE. (Coleman)—Very tall, strong spike, carrying large, well expanded flowers of rich coral pink. Slight American Beauty color in throat. Wonderful exhibition variety. (**L.**, ea. 25c; doz. \$2.40) (**M.**, 2 for 25c; doz. \$1.40.)

COMPSON, BETTY. (Diener)—Phlox pink, overlaid phlox purple. Lower petals Baryta-yellow, sprinkled purple. (**L.** ea., 50c; doz., \$4.00) (**M.**, 2 for 39c; doz. \$2.00) (**S.**, doz. \$1.00.)

COPPER BRONZE. (Kunderd.)—As named. Very unusual. (**L.**, ea. 25c; doz. \$2.40) (**M.**, 2 for 25c; doz. \$1.20) (**S.**, doz. 60c.)

CORONADO. (Briggs)—Immense heavy ruffled white with royal-purple lace-like throat. Won first prize for best single spike in California Glad show. (**L.**, ea. \$10.00) (**M.**, ea. \$7.50) (**S.**, ea. \$5.00.)

CRIMSON GLOW. Velvety glowing red. (**L.** 3 for 25c; doz. 80c) (**M.**, doz. 50c.)

CORYPHEE. (Europe.) A Pfitzer masterpiece. Very tall spike with 8 to 10 immense round, well formed flowers open at once. Soft rose-pink, same color as the inside of a fresh cut Ophelia rose. One Glad fan says this beautiful waxy-pink is found in some orchids, such as Miltonia. (**L.**, ea. \$7.00) (**M.**, ea. \$4.00.)

CYGNUS. (Kunderd.) Main color salmon-apricot. A good size, very choice, refined Prim that you'll fall in love with at first sight. Lower petals softest daffodil-yellow with fine pink throat lines. (**L.**, 2 for 25c; doz. \$1.20) (**M.**, doz. 60c) (**S.**, doz. 30c.)

DES MOINES, MISS. (Decorah)—Won the \$100.00 Sisson prize at Des Moines, 1926, for best new variety. Color pale lilac, shading to lusterian purple toward the edges of petals. Throat light marguerite-yellow. Tall, erect, wiry stem, on which the blossoms are well placed and spaced. Good healthy grower. (**L.**, ea. \$25.00) (**M.**, ea. \$12.50) (**S.**, ea. \$7.00.)

DICKENS, CHAS. (Europe.) "The New Ford". Bright radiant purple, with velvety blotch on lower petal. Strong, tall spike, with 7 or 8 large perfect flowers open at a time. Splendid placement of blooms. A very outstanding glad in its color class. Similar to the Henry Ford Glad, but color a little deeper. Spike taller, with blooms well spaced and facing one way. (**L.**, ea. 50c; Joz. \$4.80) (**M.**, ea. 25c; doz. \$2.40) (**S.**, 2 for 25c; doz. \$1.20.)

DOEHMANN, MRS. A. B. C. (Diener)—Venetian-pink, overlaid with jasper-red. Large. (**M.**, ea. \$1.00) (**S.**, ea. 60c.)

DIENER, RICHARD. (Diener)—Geranium-pink with yellow center, sprinkled ruby. (**L.**, 3 for 25c; doz. 75c) (**M.**, doz. 50c) (**S.**, doz. 25c.)

DOUGLAS, MRS. LEON. (Diener)—Gigantic in every way, and beautiful as well. Begonia-rose, striped scarlet. A sensational Glad that has captured the fancy of fans and florists. (L., 3 for 30c; doz. \$1.00) (M., doz. 60c) (S., doz. 30c.)

ELYSIANA. (Bill)—Beautiful lavender-pink with cream throat. Many open. (L., ea. \$1.00) (M., ea. 50c; doz. \$5.00) (S., ea. 25c; doz. \$2.50.)

FARRAR, GERALDINE. (Diener)—Pale lavender-violet with deep violet spot on lower petals. It has a pronounced light-blue cast, a coloring very uncommon and scarce in Glads. Flowers well placed on strong stem. Side branches of good cutting size produced freely also. (L., ea. 35c;) (M., ea. 20c) (S., 3 for 30c.)

FORD, HENRY. (Diener)—Dark velvety-purple. (L. 3 for 25c; doz., 90c.) (M. doz., 50c.) (S. doz., 25c.)

FREY, MARY. (Gelser Bros.)—Originator's description: "Beautiful lavender-pink with a ruby blotch on lower petal; resembles a cattleya orchid in color. Flowers large, perfectly placed on long, straight, slender stem, with 6 to 9 florets of lasting quality open at a time. Blooms early, vigorous grower and very prolific. It will be grown by the millions as soon as stock is available." One of the outstanding good features of this Glad is its early blooming. There are others similar, but none in this color class so early, that I know of. (L., ea. \$6.00) (M., ea. \$3.00.) (S. ea. \$1.50.) (Bits. 6 for \$2.40; 25 for \$7.50.)

GIANT NYMPH. (Joe Coleman)—LaFrance pink, with creamy-yellow throat. Very large wide-open flowers, well arranged on tall, strong spike. A remarkably good Glad. (L., 3 for 25c; doz. 90c) (M., doz. 50c) (S., doz. 25c.)

GLORIANA. (Betscher)—Fine large salmon, no markings. Very, very, lovely. Plenty fine blossoms on tall, straight, strong spike. (L., ea. 40c; doz. \$4.00) (M., ea. 25c; doz. \$2.00) (S., 2 for 25c; doz. \$1.20)

GOLD. (Dec.) Yellow. (L., 3 for 25c; doz. 80c) (M., doz. 50c.)

GOLD EAGLE. (Austin)—Deep rich yellow, daintily frilled blooms of good substance. Marvelous for producing good spikes from bulbets and many spikes from large bulbs. Early. Increases so fast and furiously that prices greatly reduced. (L., ea. 40c; doz. \$4.00) (M., ea. 25c; doz. \$2.50) (S., 2 for 25c; doz. \$1.25)

GOLDEN DREAM. (Groff)—One of the best clear deep yellows to date. (L., ea. \$1.00) (M., ea. 50c) (S., ea. 30c.)

GOLDEN FRILLS. (Kunderd.) Deep rich daffodil-yellow with pink (nearly red) lines on lower petals. Intensely and beautifully ruffled. Perfectly charming. Multiples so rapidly that prices now within reach of all. (L., ea. 50c; doz. \$5.00) (M., ea. 25c; doz. \$2.50) (S., 3 for 25c; doz. 90c.)

GOLDEN SALMON. (Kunderd.)—Beautiful ruffled glad of golden-yellow with salmon-red blending. (M. 2 for 30c; doz., \$1.50.) (S. doz., 74c.)

GOLDEN MEASURE. Large, tall yellow. (L., 3 for 33c; doz. \$1.00.)

GOODRICH, OLIVE. (Goodrich)—White with tips of petals beautifully edged pink. Throat tinted yellow. A most wonderful and charming color effect. Blossoms large and splendidly placed on good strong erect spike. Vigorous grower. You must have this one, sure. (L., ea. 40c; doz. \$4.00) (M., ea. 25c; doz. \$2.50.)

HANKS, NANCY. (Salbach)—Peach-red to orange-pink. Very unusual and pleasing. Strong erect spikes hold the blossoms all facing one way and evenly spaced. Side spikes produced freely. Stays in bloom long time. Fine for landscape. Stands heat remarkably well. Won honors at the big Glad shows in England and Holland. Rapid propagator, hence these most reasonable prices for so fine a Glad. (L., ea. 25c; doz. \$2.50) (M., 3 for 25c; doz. 90c) (S., doz. 50c.)

HARDING, PRESIDENT. A new dark red. (M. 2 for 25c; doz., \$1.20.) (S. 4 for 25c; doz., 60c.)

HEAVENLY BLUE. (Europe)—Soft lavender-blue, somewhat lighter than Mrs. Van Konyenburg. About the color of Geraldine Farrar. Very tall, straight spike with 8 or 10 fine blossoms open at one time. Stock scarce and in demand. (L., ea. \$5.00) (M., ea., \$3.00.) (S. ea., \$2.00.) (Bits. 2 for \$1.00; 25 for \$11.00.)

HERBSTZAUBER. (Europe)—Glowing orange salmon. Large round flowers well placed on strong spike. (L., ea. 50c; doz. \$4.80) (M., ea. 30c; doz. \$3.00) (S., 2 for 30c; doz. \$1.50.)

HIGHLAND LADDIE. (Kunderd.) Large pink of unusual shade. (L. 3 for 25c; doz., 80c.) (M. doz., 50c.)

HORNBERGER, MRS. F. C. (Hornberger.) Splendid new prize-winning white. (Sold out until next fall.)

IRVING, MABEL. (Briggs.) Large, ruffled pink. (L. ea., \$1.00; doz., \$10.00.) (M. ea., 50c; doz., \$5.00.) (S. ea., 25c; doz., \$2.50.)

ISOLENE. (Diener.) New slate or smoky glad. (L. ea., 50c.) (M. ea., 30c.) (S. 2 for 30c.)

JEWEL. (C. Z.) Tall pink with yellow throat. (L. doz., 66c.) (M. doz., 40c.)

JOERG'S WHITE. (Joerg.) Extra large white. (L. ea., 60c; doz., \$6.00.) (M. ea., 30c; doz., \$3.00.)

JOY, BETTY. (Bill.) Soft creamy white, flushed LaFrance-pink. Many open, on fine, strong, straight spike. Placement perfect. (L. ea., 40c; doz., \$4.00.) (M. ea., 25c; doz., \$2.50.) (S. 3 for 25c; doz., 90c.)

KONYNEBURG, MRS. VAN. (Europe.) Similar in color to Geraldine Farrar, but a little deeper blue. Has been well described as "Matchless aniline blue, beats far the color of Badena, grows 5 feet tall, spikes erect, flowers well placed." Healthy, strong grower, and very satisfactory propagator. Bulbets germinate readily. (L. ea., \$1.00.) (M. ea., 60c.) (S. ea., 40c; doz., \$4.00.)

KUNDERD, A. E. (Kunderd.) Immense salmon-rose. Strong grower. (M. ea., \$1.00; doz., \$9.00.) (S. ea., 40c; doz., \$4.00.)

KUNDERD, MARIE. (Kunderd.) Glorious ruffled white. Scores high in every way. Early. (L. 3 for 25c; doz., 90c.) (M. doz., 60c.) (S. doz., 30c.)

KUNDERD, ROBT. J. (Kunderd.) Rich deep red. One of the best reds. (L. 2 for 30c; doz., \$1.50.) (M. 3 for 25c; doz., 80c.) (S. doz., 40c.)

LOS ANGELES. (Houdyshel.) The famous "Cut-and-Come-Again" glad. Not all plants will produce additional spikes from the stump after original one cut, but if well cared for many of them will. Side branches also produced in abundance. A most sturdy, rank, healthy grower and really extravagant with its spikes of blooms. The color is beautiful shrimp-pink—just a little "salmony," tinted orange. It's a beauty. Increases very fast. Even small bulbs usually bloom. (L. 3 for 25c; doz., 80c.) (M. doz., 50c.) (S. doz., 25c.)

LILAC WONDER. (Europe.) Lilac-lavender. Something like Minuet in color, but smaller. Not a Prim. (L. 2 for 25c; doz., \$1.20.) (M. 4 for 25c; doz., 60c.) (S. doz., 40c.)

LONGFELLOW. (Decorah.) A "Delightful Different" pink glad that has made a great hit with amateurs, fans and florists. Having for one of its parents that well-built, lasting glad, Carmen Sylva, this new variety inherits the tall, slender but straight and wiry spike, the flowers well spaced and faced, the resistance to heat. In comparative tests Longfellow has stood up perfectly while other popular varieties drooped and wilted. (L. ea., 30c; doz., \$3.00.) (M. 2 for 25c; doz., \$1.40.) (S. 3 for 25c; doz., 90c.)

MADISON, MISS. (Boynton.) Dainty pink overlaid on white. No markings. One of the few clear light-pink glads. (L. 2 for 30c; doz., \$1.20.) (M. doz., 60c.) (S. doz., 25c.)

MARY JANE. (Kunderd.) Silvery lavender-pink, with delicate clear lavender throat. (L. ea., \$1.50.) (M. ea., \$1.00.) (S. ea., 60c.)

MERCEDE. (Briggs.) A running mate for Balboa. Something alike, but still different. Both fine. Brilliant orange-saffron, shading into lighter yellow in throat. Large blooms, daintily ruffled. (L. ea., \$1.00.) (M. ea., 50c.)

MISSION BELLS. (Briggs.) Beautiful hooded Prim of rich orange-pink. (L. ea., \$1.00.)

MINUET. (Joe Coleman.) Ever think of how many real super-glads Joe Coleman has originated? Has to be a mighty fine glad if Joe gives it a name and releases any of the stock. Now here we have this Minuet, a lively lilac-lavender with creamy throat. Ever notice, also, that Minuet is used as a measuring stick, so to speak, for all similar colored glads? Minuet has the size, the strong straight stem, the placement of bloom, the color that has long been sought in this color class. A single well-grown spike of Minuet is a delight, while a bunch of this variety is too wonderful for mere me to describe. (L. ea., \$1.00.) (M. ea., 60c.) (S. ea., 40c.)

MCUTCHEON, JOHN T. (Kunderd.) Large red. (M. 2 for 35c; doz., \$1.80.) (S. 3 for 25c; doz., 80c.)

MOTHER MACHREE. (Stevens.) Winner of the 1927 Seedling Sweepstakes Prize at National Glad Show, Hartford. Unusual smoky color. Tall straight spike. Blooms good size and well placed, 6 or 7 open at one time. A distinct novelty that will be wanted by all glad fans. Large bulbs, each, \$100.00. Good selected bulbets, each, \$10.00; 3 for \$25.00.

NIXIE. (Diener.) Jasper pink with spectrum-red near base. Beautifully ruffled blooms. Good straight, tall spike. There is a peculiar, unusual and pleasing sheen over all that makes these blossoms stand out and attract attention as far as can be seen in the field. One of the most rapid propagators I've ever found. Hence the new and much lower prices. (L. ea., 40c; doz., \$3.60.) (M. ea., 25c; doz., \$2.40.) (S. 2 for 25c; doz., \$1.20.)

NUTHALL, BETTY. (Salbach.) Warm light coral with pale orange throat, feathered carmine. (L. ea., \$7.50.) (M. ea., \$5.00.) (S. ea., \$2.50.)

OLIVER, J. D. (Kunderd.) Lavender-rose. Large spike and large blooms. (S. 2 for 30c; doz., \$1.50.)

OPALESCENT. (Bill.) "Nothing cheap about this but the price." Big, tall, husky plant with large rose-lavender blossoms to match. Worth more money, but is such a vigorous grower that can be sold at a profit at these prices. (L. 2 for 25c; doz., \$1.20.) (M. doz., 60c.) (S. doz., 30c.)

ORANGE QUEEN. (Europe.) Beautiful copper-orange Prim of good size. Wonderful for baskets. (L. 3 for 25c; doz., 90c.) (M. doz., 50c.) (S. doz., 25c.)

ORANGE WONDER. (J. A. Kemp.) Mr. Kemp says he believes this is the best orange colored Glad ever offered. Practically solid color. Flowers large, wide open and well placed on good spike. Very brilliant. Sturdy grower. (L. ea., \$5.00.) (M. ea., \$3.00.) (S. ea., \$2.00.) (Blts. 2 for \$1.00; 6 for \$2.50; 25 for \$6.25.)

ORCHID. (Sprague.) Lavender-pink upon a pale flushed frosted surface. Edges beautifully lacinated and ruffled. So resembles an orchid that the name was not hard to decide upon. Rapid propagator and strong grower. (L. ea., \$1.00.) (M. ea., 60c.) (S. ea., 30c.)

OSALIN. (Salbach.) Coral-pink with rich soft orange marking in throat. (M. ea., 25c; doz., \$2.50.) (S. 2 for 30c; doz., \$1.50.)

PEARL OF CALIFORNIA. (Kingsley.) Here we have another top notcher in glads. Friend Kingsley sure put one over when he built Pearl of California. Soft LaFrance-pink, blending to rosy throat. Immense blooms and many of them open at one time. Good spike and good placement. (L. ea., \$1.00.) (M. ea., 70c.) (S. ea., 40c.)

PENDLETON, MRS. FRANK. Light pink with dark red blotch in throat. (L. 3 for 25c; doz., 80c.)

PETERS, MRS. F. J. (Fischer.) Lavender or orchid-color, with darker throat. Fine glad. (M. doz., 60c.) (S. doz., 25c.)

PFITZER, PAUL. (Europe.) Brilliant velvety purple. (L. ea., \$1.00; doz., \$9.00.) (M. ea., 50c; doz., \$4.80.) (S. ea., 25c; doz., \$2.40.)

PHAEONOMEN. (Europe.) Pleasing combination of soft pink and delicate yellow. (L. ea., 30c.) (M. 2 for 25c; doz., \$1.50.) (S. 3 for 25c; doz., 90c.)

PHIPPS, W. H. (Diener.) Well known as "The Wonder Glad". Really marvelous, when well grown. Not all spikes so wonderful, but many will display 14, 16, 18 and even 20 full open, unfaded blooms at once. Blooms large and beautiful. The effect is something never to be forgotten. I consider this as Diener's masterpiece. The color is lovely iridescent pink. Spikes almost always straight. The marvelous thing about this glad is that the first blossoms hang on, and on, without drooping until nearly all have opened. Then many blooms will remain open for days. Finally, nearly all go to pieces all at once, like the Deacon's one-hoss shay. A Phipps spike should last from a week to ten days if taken care of. Small bulbs often bloom, but with shorter spikes. Plant small for growing strong bulbs for next year; medium and large for good blooms first season. (L. ea., 25c; doz., \$2.40.) (M. 2 for 25c; doz., \$1.20.) (S. doz., 60c.)

PINK WONDER. (Kemp.) Large light pink. (L. 3 for 25c; doz., 80c.) (M. doz., 50c.)

PURPLE GLORY. (Kunderd.) Deep purplish-red. Well ruffled. (L. 3 for 30c; doz., \$1.00.) (M. doz., 60c.)

QUAKER MAID. (Bill.) Soft lavender-pink, nearly white. Tall, strong spike. (L. 2 for 30c; doz., \$1.40.) (M. 4 for 25c; doz., 60c.) (S. doz., 30c.)

QUEEN OF NIGHT. (Diener.) Deep maroon, almost black. (L. ea., 60c; doz., \$6.00.) (M. ea., 30c; doz., \$3.00.) (S. 2 for 25c; doz., \$1.20.)

ROSE ASH. Ashes of roses. (L. 3 for 25c; doz., 90c.)

ROSE MULBERRY. (Austin.) Mrs. Austin says: "To say this is coral-pink, flushed Ageratum-violet only approaches the description, for words cannot describe the unusual and unique beauty of the variety." (L. ea., \$1.00.) (M. ea., 50c.) (S. ea., 25c.)

RUFFLED GOLD. (Goodrich.) Originator's description, which checks with my own experience to date: "Lovely golden-yellow, beautifully ruffled; of distinct form and different from any other yellow; long spike, strong, healthy grower, good producer of bulblets. Almost every bulblet will grow." (L. ea., \$10.00.) (M. ea., \$5.00.) (Blts. ea., 50c; doz., \$5.00.)

SALMON GLOW. (Hornberger.) A first early giant Prim. Orange-salmon with yellow throat. (L. ea., 25c; doz., \$2.40.) (M. 2 for 25c; doz., \$1.20.) (S. doz., 60c.)

SCARLET WONDER. (Cowee.) Immense brilliant red. (L. 3 for 25c; doz., 80c.) (M. doz., 50c.) (S. doz., 30c.)

SCHWEPPE, MRS. LAURA. (Kunderd.) Peach blossom pink with dark throat. (L. ea., 30c; doz., \$3.00.) (M. 2 for 25c; doz., \$1.20.) (S. doz., 60c.)

SERRATA. (Bill.) Cream, suffused lilac-pink. Petals serrated or laciniated. (L. ea., 50c; doz., \$4.00.) (M. ea., 25c; doz., \$2.00.) (S. 2 for 25c; doz., \$1.00.)

SHOOK, DR. NELSON. (Kunderd.) Deep tyrian-rose. Large and ruffled. (Sold out until next fall.)

SILLS, MILTON. (Diener.) Ground color alizarine pink, heavily overlaid with rose doree and Jasper red. (S. ea., 30c; doz., \$3.)

SISSON, MRS. P. W. (Joe Coleman.) Clear cameo-pink of heavy substance and beautiful form. Many large flowers open. Awarded first prize best new variety by Am. Glad. Society in 1924. Introduced that fall at \$100 a bulb. Bulblets run small but lots of them and seems like every one grows. Hence stocks have increased splendidly and prices now very reasonable. (L. ea., 50c; doz., \$5.00.) (M. ea., 30c; doz., \$3.00.) (S. 2 for 30c; doz., \$1.50.)

SONNENBERG. (Bill.) Massive spikes of creamy pink lightly flaked with lavender. The pink shades away to soft yellow in throat. Magnificent for exhibition or cut flowers. (L. ea., \$2.00; doz., \$20.00.) (M. ea., \$1.00; doz., \$10.00.) (S. ea., 50c; doz., \$5.00.)

SOUVENIR. (Europe.) Yellow Prim, not much hooded. Early. (L. 3 for 25c; doz., 80c.)

SOVEREIGN. (Vaughan.) Be careful. Don't confuse this with Souvenir. Unfortunately the names so nearly alike. The two glads entirely different. *Sovereign* is a rich violet-purple, something like the old, well-known Baron Hulot. Unlike Hulot, this new glad is a very strong, healthy grower, increasing fast. Makes good bulblets, plenty of them, and they grow well. The spike is tall and flowers larger than Hulot. (L. ea., 25c; doz., \$2.40.) (M. 2 for 25c; doz., \$1.00.) (S. doz., 60c.)

SWARTLEY, ELIZABETH. (Swartley.) Propagated from a sport found in a field of 1910 Rose glads. Soft salmon-pink, blending into creamy-white throat. Vigorous grower, 5 to 7 blooms open, well faced, good straight spike. Early, same season as 1910 Rose. (L. ea., 50c.) (M. ea., 25c.) (S. 2 for 30c.)

SYLVA, CARMEN. (Decorah.) That splendid pure white with perfect spike. Plenty open at one time. (L. 4 for 25c; doz., 70c.) (M. doz., 40c.)

TABOR, ELIZABETH. (Hinkle.) Delicate rosy-pink on white ground. Crimson blotch on lower petals. Similar to Pendleton, but very much earlier. (L. 3 for 25c; doz., 90c.) (M. doz., 60c.)

THEDA. (Bill.) Shrimp pink, yellow throat. Extra early. (L. doz., 70c.) (M. doz., 40c.)

TRIUMPH, PFITZER'S. (Europe.) One thinks of it as a red, but it's a bright salmon-orange, similar in color to Dr. Bennett. Immense blooms, even from bulblets. Greatly in demand. (L. ea., \$1.25.) (M. ea., 75c.)

VEILED BRILLIANCE. (Austin.) Originator's description: "Bright pink blooms with creamy throat; tinted grayish-blue, having the appearance of being thinly veiled. Double row of well-placed flowers 5 to 6 inches in diameter, with as many as ten open at one time. 'Simply glorious,' is the verdict from many who have tried it. Increases well." (L. ea., 75c; doz., \$7.20.) (M. ea., 40c; doz., \$4.00.) (S. ea., 25c; doz., \$2.20.)

VEILCHENBLAU. (Europe.) Very popular, much wanted, large blue. Violet-blue flowers of large size. Larger and darker than Farrar, Konynenburg or Heavenly Blue. Has proven a very strong and satisfactory grower in my fields. The biggest Holland glad growers refer to this in their catalogue as "The always-running-short gladiolus," meaning they are never able to supply the demand. (L. ea., 60c; doz., \$6.00.) (M. ea., 35c; doz., \$3.60.) (S. ea., 25c; doz., \$2.20.)

VICTOR. (Bill.) Do not confuse with an Australian variety by same name. This glad originated by Gladiolus Bill himself. Very large, ruffled cream-yellow with heavy ruby central lines. Tall, vigorous and fine. Good exhibition variety. (L. ea., 50c; doz., \$4.80.) (M. ea., 30c; doz., \$2.40.) (S. 3 for 30c; doz., \$1.00.)

VIRGINIA or SCARLET PRINCEPS. (Kunderd.) Very bright red. Spike rather short, otherwise excellent in every way. (L. 4 for 25c; doz., 70c.) (M. doz., 40c.) (S. doz., 25c.)

WOOD, MRS. JOHN S. (Metzer.) Similar to Mrs. Douglas. Prices same as for Douglas.

YELLOW WONDER. (Kunderd.) Near buttercup-yellow. Tall, vigorous and early. One of the wonders about this new glad is the large number of bulblets it makes and how well they germinate and grow. Bulblets not so very large, but how they do grow! (L. ea., 50c; doz., \$4.80.) (M. ea., 25c; doz., \$2.40.) (S. 2 for 30c; doz., \$1.20.)

ZANG, TYCKO. (Austin.) Another rather new glad that increases faster than the proverbial Belgian hares. Bulblets small, but thin shelled so grow about 100 per cent with half a chance. Tycko Zang is a very large salmon-pink with white throat. Blooms measure 5 to 6½ inches. (L. 2 for 25c; doz., \$1.20.) (M. 3 for 25c; doz., 72c.) (S. doz., 40c.)

Pink Glads, Not Labeled

(Not named.) Selected from whatever stocks I can spare best. May be all one kind or shade, or run from light to deep pink. Extra good value always. (L. 20 for \$1.00.) (M. 40 for \$1.00.) (S. 80 for \$1.00.)

Exhibition Mixed Glads

Bigger value than can be bought if each kind labeled. This mixture will include some of the newer kinds never before used in my best mixture. (L. 14 for \$1.00; 100 for \$6.00.) (M. 30 for \$1.00; 100 for \$3.00.) (S. 100 for \$1.50.)



New Lavender Glad, "Dr. Moody"

Originated by Mrs. George Kinyon. Introduced by Stephen B. Jacobs. Medium lavender, sometimes flaked darker. Has won many prizes. Good spikes with well-placed large blooms, many open. Strong, healthy grower, often blooming from bulbets. Large bulbs, ea., \$5.00. Medium, \$2.50. Small, \$1.25. Bulbets, 10 for \$3.50; 100 for \$20.00.

Assortment of Rare Glads

One bulb each (size $\frac{3}{4}$ ths inch or larger) Dr. Moody, Heavenly Blue, Coryphee, Mrs. Van Konyenburg, Pfitzer's Triumph, Minuet, Mary Frey, Pearl of California, Yellow Wonder—the 9 bulbs for \$10.00, prepaid.

Gladiolus Bulblets

Number bulblets in packet based on the 100 or 1,000 price for that variety, but somewhat fewer in proportion, for the smaller price. 250 or more bulblets at the 1,000 rate.

Variety	Per Packet	Per 100	Per 1,000
Balboa	\$.40	\$ 3.00	\$
Beck, Rita	.50	10.00	90.00
Bennett, Dr. F. E.	.30	.50	4.00
Bobby	.30		2.00
Break O'Day	.25		2.50
Bunce, Allen V.	.30	.70	6.00
Carbone, J. A.	.25		1.00
Cardinal Prince	.25	.50	4.00
Carter, Patricia	.50	6.00	
Catalina	.30	3.00	
Compson, Betty	.30	1.20	10.00
Copper Bronze	.25		2.00
Cygnus	.25		1.60
Dickens, Chas.	.40	1.40	12.00
Dohrmann, Mrs. A. B. C.	.75	7.00	60.00
Diener, Richard	.25		1.00
Douglas, Mrs. Leon	.25		1.60
Elysiana	.30	3.00	25.00
Farrar, Geraldine	.40	1.00	9.00
Ford, Henry	.25		.80
Giant Nymph	.25		1.00
Gloriana	.25	1.00	
Gold Eagle	.25	3.00	25.00
Golden Frills	.25	1.00	9.00
Golden Salmon	.25	.50	
Hanks, Nancy	.25		2.00
Harding, President	.25	1.00	9.00
Herbstzauber	.40	2.00	18.00
Highland	.25		.70
Irving, Mabel	.25	1.50	
Isolene	.40	1.00	9.00
Jewel	.25		.70
Joerg's White	.40	3.50	
Joy, Betty	.30	1.00	9.00
Konynenburg, Mrs. Van	.60	9.00	8.00
Kunderd, A. E.	.60	3.00	
Kunderd, Marie	.25		.80
Kunderd, B. J.	.25		1.50
Lilac Wonder	.25	.35	3.00
Longfellow	.30	1.00	8.00
Los Angeles	.25		1.20
Madison, Miss	.25		1.50
Mary Jane	.40	6.00	50.00
Merced	.40	3.00	
Mission Bells	.25	2.00	
Minuet	.60	8.00	70.00
Nixie	.25	1.00	8.00
Opalescent	.25		1.20
Orange Queen	.25		1.00
Orchid	.50	3.00	25.00
Pearl of Calif.	.60	9.00	
Peters, Mrs. F. J.	.25		1.00
Pfitzer, Paul	.50	4.00	
Phaenomen	.30	1.25	10.00
Phipps, W. H.	.25	.40	3.50
Quaker Maid	.25		2.00
Queen of Night	.30	1.50	12.00
Rose Mulberry	.40	6.00	50.00
Salmon Glow	.25		2.50
Scarlet Wonder	.25		1.00
Schweppe, Mrs. Laura	.25	.40	3.50
Serrata	.25	.60	5.00
Sills, Milton	.40	1.50	
Sisson, Mrs. P. W.	.40	1.00	9.00
Sonnenberg	.50	6.00	5.00
Sovereign	.25	.50	4.00
Swartley, Elizabeth	.30	2.00	16.00
Theda	.25		.80
Triumph, Pfitzer's	.75	8.00	
Veiled Brilliance	.30	6.00	50.00
Veilchenblau	.40	4.00	35.00
Victor	.25	.50	4.00
Virginia	.25		.80
Wood, Mrs. John S.	.25		1.60
Yellow Wonder	.25	1.20	10.00
Zang, Tycko	.25		2.00
Exhibition Mixed Glads	.30		3.00

Larger Lots of Gladiolus Bulbs at Wholesale Price

25 or more bulbs at the 100 rate. Pint or half-pint bulblets at quart rate out of size ordered, will send size smaller, adding more bulbs to make up the difference, unless you request us not to do so. No substitution of varieties in the following. Measurements are diameter of bulbs.

ALL PREPAID Variety	Size No. 1 1½ In. Up	Size No. 2 1¼ to 1½ In.	Size No. 3 1 to 1¼ In.	Size No. 4 ¾ to 1 In.	Size No. 5 ½ to ¾ In.	Size No. 6 ¼ to ½
Beck, Rita	\$100.00	\$90.00	\$80.00	\$70.00	\$50.00	\$40.00
Bennett, Dr.	\$16.00	\$12.00	\$8.40	\$6.00	\$5.00	
Bobby	\$12.00	\$10.00	\$8.00	\$6.00	\$4.00	\$3.00
Break O' Day			\$5.00	\$4.00	\$3.00	\$2.00
Bunce, A. V.	\$20.00	\$16.00	\$12.00	\$8.00	\$6.00	\$4.00
Carbone, J. A.	\$6.00	\$5.00	\$4.00			
Cardinal Prince	\$20.00	\$16.00	\$12.00	\$10.00	\$8.00	\$5.00
Carter, Patricia	\$90.00	\$80.00	\$60.00	\$44.00	\$36.00	\$30.00
Compson, Betty	\$30.00	\$24.00	\$20.00	\$14.00	\$8.00	\$6.00
Copper Bronze	\$18.00	\$15.00	\$12.00	\$9.00	\$6.00	\$3.00
Coryphæe	\$500.00	\$400.00	\$350.00	\$300.00		
Cygnus		\$6.00	\$5.00	\$4.00	\$2.80	\$1.60
Dickens, Chas.	\$40.00	\$30.00	\$20.00	\$16.00	\$10.00	\$6.00
Diener, R.	\$5.40	\$4.20	\$3.40	\$2.60	\$1.80	\$1.00
Mrs. Dohrmann			\$70.00	\$60.00	\$44.00	\$36.00
Douglas, Mrs. L.	\$6.60	\$5.40	\$4.80	\$3.60		
Farrar, Gerald		\$32.00	\$25.00	\$16.00	\$12.00	\$8.00
Ford, Henry	\$5.00	\$4.00	\$3.20			
Frey, Mary		\$300.00	\$200.00	\$150.00	\$100.00	\$80.00
Giant Nymph	\$6.60	\$5.40	\$4.20	\$2.80	\$1.60	\$1.00
Gloriana	\$40.00	\$30.00	\$20.00	\$16.00	\$12.00	\$8.00
Gold Eagle	\$40.00	\$32.00	\$24.00	\$20.00	\$10.00	\$7.00
Golden Frills	\$40.00	\$32.00	\$24.00	\$20.00	\$10.00	\$5.00
Golden Salmon			\$16.00	\$10.00	\$6.00	
Hanks, Nancy		\$6.00	\$4.80	\$3.60	\$2.40	\$1.60
Harding, Pres.			\$9.00	\$7.00	\$5.00	
Heavenly Blue	\$500.00	\$400.00	\$300.00	\$250.00	\$200.00	\$150.00
Highland Laddie	\$7.00	\$5.00	\$4.00			
Jewel	\$4.00	\$3.20	\$2.60			
Joy, Betty	\$30.00	\$24.00	\$20.00	\$16.00	\$10.00	\$7.00
Konynenburg, Mrs.	\$100.00	\$80.00	\$60.00	\$50.00	\$32.00	\$24.00
Kunder, Marie			\$3.60	\$2.40	\$1.50	\$0.80
Kunder, Robert	\$6.40	\$5.00	\$4.00	\$3.00	\$2.40	\$1.60
Lilac Wonder	\$9.00	\$8.00	\$6.00	\$3.60	\$2.40	\$1.60
Longfellow		\$16.00		\$8.00	\$6.00	\$4.00
Los Angeles	\$5.00	\$4.00	\$3.20	\$2.50	\$1.50	\$0.80
Minuet	\$100.00	\$80.00	\$60.00	\$50.00	\$32.00	\$24.00
Moody, Dr.	\$300.00	\$250.00	\$200.00	\$150.00	\$100.00	\$80.00
Nixie	\$6.00	\$5.00	\$4.00	\$2.40	\$1.60	\$0.80
Opalescent	\$5.40	\$4.00	\$3.20	\$2.50	\$1.80	\$1.00
Orange Queen			\$5.00	\$4.00	\$2.40	\$1.80
Orchid, The			\$60.00	\$50.00	\$32.00	\$24.00
Pearl of Calif.	\$100.00	\$80.00	\$60.00	\$50.00	\$32.00	\$24.00
Peters, Mrs. F. C.			\$3.20	\$2.40	\$1.60	\$0.80
Pfitzer, Paul	\$64.00	\$50.00	\$40.00	\$24.00	\$16.00	\$10.00
Phaenomen	\$24.00	\$20.00	\$15.00	\$12.00	\$6.00	\$4.00
Phipps, Mr. W. H.	\$20.00	\$16.00	\$12.00	\$9.00	\$6.00	\$3.00
Purple Glory	\$6.40	\$5.00	\$4.20			
Quaker Maid	\$3.00	\$6.60	\$5.00	\$4.00	\$2.50	\$1.20
Queen of Night			\$20.00	\$16.00	\$10.00	\$6.00
Rose Mulberry	\$60.00	\$44.00	\$30.00	\$20.00	\$15.00	\$12.00
Salmon Glow			\$5.60	\$4.00	\$2.40	\$1.80
Sisson, Mrs. F. W.	\$48.00	\$40.00	\$30.00	\$22.00	\$12.00	\$8.00
Sonnenberg	\$100.00	\$80.00	\$60.00	\$50.00	\$32.00	\$24.00
Sovereign	\$14.00	\$10.00	\$7.00	\$5.00	\$3.60	\$2.40
Swartley, Elz.		\$20.00	\$16.00	\$10.00	\$8.00	\$6.00
Theda	\$4.00	\$3.20	\$2.40	\$1.80		
Triumph, Pfitzers	\$120.00	\$110.00	\$80.00	\$60.00	\$40.00	
Veiled Brilliance	\$50.00	\$40.00	\$30.00	\$20.00	\$15.00	\$10.00
Velichenblau	\$50.00	\$40.00	\$30.00	\$20.00	\$16.00	\$11.00
Victor		\$20.00	\$16.00	\$10.00	\$6.00	\$3.00
Wood, Mrs. John S.	\$6.60	\$5.40	\$4.80	\$3.60		
Yellow Wonder	\$33.00	\$27.00	\$20.00	\$14.00	\$11.00	\$7.00
Zang, Tycko	\$10.00	\$8.00	\$6.00	\$3.00		

NOTE:—In event of shortage, retail orders take precedence over wholesale.

TO LARGE BUYERS: Growers, dealers and others who can use large quantities of variety, or a good big order of assorted varieties, please mail me a definite list of kinds, sizes and quantities you can use from my catalogue. Chances are I can save you money on the lot. Or, make out your order on your letterhead and I'll exceed it in over-count so long as stocks on hand will permit.

lap on the back in appreciating after this cover job Hugh Stephens plant. He did service. Thanks, J. O.

Had Neuritis?

be proud of. Probably telling a fellow that he's body at least half the that he gives his car. Now we pore over the constitution and care of any auto to know as much about cars built, and why, or what for this marvelous human. And yet, we can replace the works, of the car, but teeth, a glass eye or cork at deal along that line for

as not exactly new. It is, and really an old ritis, several years ago. This in me early in December, to prepare copy for this when a fellow is supposed to be cheerful to one and home, in order to stand as well as do his bit annual holiday season a

and sure had a Merry made to receive so many presents from my custom I never dreamed of me in this connection more worth living.

zens of suggested rem- id 'ritis, just about all ing a rabbit's foot to one some sort of strong be I should have gone he first place. One of tters said that neuritis may leave a fellow ld get that wave length w money can do that,

g is that 'ritis is not for about a month in left side was not only slept in the same bed practically every night. he 'ritis. But I must space for this. Except it am feeling ever so think I have this pest at least. Also, let me matter who it is, if he any other affliction half on the nerves, please e if the person seems Sometimes I think it ing if everyone had a of 'ritis. We'd under- ter, maybe.

Best, After All

right and shining silver —this thing of having for talking. I really a tip and not reserved after checking up and and Smith both lost so tates where they talked. er crops of votes where Now since what I really run, is your orders with something just as good like I'm defying fate to

CORRECTED WHOLESALE PRICE LIST

Notice regarding error: The first few copies of my spring catalogue were printed before I noticed that the names of varieties of glads and the price for each did not line up. The names were set on one slug and the prices on another. Somehow or other they failed to "jibe" on the press, making it confusing as to just what prices go with a certain variety. Corrected list is on this sheet. J. D. Long, Boulder, Colo.

Larger Lots of Gladiolus Bulbs at Wholesale Prices

25 or more bulbs at the 100 rate. Pint or half-pint bulblets at quart rate. If sold out of size ordered, will send size smaller, adding more bulbs to make up the difference in price, unless you request us not to do so. No substitution of varieties in the following list. Measurements are diameter of bulbs.

ALL PREPAID Variety	Size No. 1 1½ In. Up	Size No. 2 1¼ to 1½ In.	Size No. 3 1 to 1¼ In.	Size No. 4 ¾ to 1 In.	Size No. 5 ½ to ¾ In.	Size No. 6 ¼ to ½ In.	Bulblets Per Qt.
Beck, Rita	\$100.00	\$90.00	\$80.00	\$70.00	\$50.00	\$40.00	
Bennett, Dr.	\$16.00	\$12.00	\$8.40	\$6.00	\$5.00		
Bobby	\$12.00	\$10.00	\$8.00	\$6.00	\$4.00	\$3.00	\$9.00
Break O'Day			\$5.00	\$4.00	\$3.00	\$2.00	
Bunce, A. V.	\$20.00	\$16.00	\$12.00	\$8.00	\$6.00	\$4.00	\$16.00
Carbone, J. A.	\$6.00	\$5.00	\$4.00				\$3.60
Cardinal Prince	\$20.00	\$16.00	\$12.00	\$10.00	\$8.00	\$5.00	\$20.00
Carter, Patricia	\$90.00	\$80.00	\$60.00	\$44.00	\$36.00	\$30.00	
Compsom, Betty	\$30.00	\$24.00	\$20.00	\$14.00	\$8.00	\$6.00	\$32.00
Copper Bronze	\$18.00	\$15.00	\$12.00	\$9.00	\$6.00	\$3.00	\$14.00
Coryphee	\$500.00	\$400.00	\$350.00	\$300.00			
Cygnus		\$6.00	\$5.00	\$4.00	\$2.80	\$1.60	\$5.00
Dickens, Chas.	\$40.00	\$30.00	\$20.00	\$16.00	\$10.00	\$6.00	\$40.00
Diener, E.	\$5.40	\$4.20	\$3.40	\$2.60	\$1.80	\$1.00	\$3.00
Dohrmann, Mrs.			\$70.00	\$60.00	\$44.00	\$36.00	
Douglas, Mrs. L.	\$6.60	\$5.40	\$4.80	\$3.60			\$3.00
Farrar, Gerald		\$32.00	\$25.00	\$16.00	\$12.00	\$8.00	\$40.00
Ford, Henry	\$5.00	\$4.00	\$3.20				\$4.00
Frey, Mary		\$300.00	\$200.00	\$150.00	\$100.00	\$80.00	\$600.00
Giant Nymph	\$6.60	\$5.40	\$4.20	\$2.80	\$1.60	\$1.00	\$6.00
Gloriana	\$40.00	\$30.00	\$20.00	\$16.00	\$12.00	\$8.00	
Gold Eagle	\$40.00	\$32.00	\$24.00	\$20.00	\$10.00	\$7.00	\$50.00
Golden Frills	\$40.00	\$32.00	\$24.00	\$20.00	\$10.00	\$5.00	\$40.00
Golden Salmon			\$16.00	\$10.00	\$6.00		
Hanks, Nancy		\$6.00	\$4.80	\$3.60	\$2.40	\$1.60	\$7.00
Harding, Pres.			\$9.00	\$7.00	\$5.00		\$20.00
Heavenly Blue	\$500.00	\$400.00	\$300.00	\$250.00	\$200.00	\$150.00	\$1400.00
Highland Laddie	\$7.00	\$5.00	\$4.00				
Jewel	\$4.00	\$3.20	\$2.60				\$2.00
Joy, Betty	\$30.00	\$24.00	\$20.00	\$16.00	\$10.00	\$7.00	\$30.00
Konynenburg, Mrs.	\$100.00	\$80.00	\$60.00	\$50.00	\$32.00	\$24.00	\$300.00
Kunderd, Marie			\$3.60	\$2.40	\$1.50	\$0.80	\$4.00
Kunderd, Robert	\$6.40	\$5.00	\$4.00	\$3.00	\$2.40	\$1.60	\$8.00
Lilac Wonder	\$9.00	\$8.00	\$6.00	\$3.60	\$2.40	\$1.60	\$9.00
Longfellow		\$16.00		\$8.00	\$6.00	\$4.00	\$25.00
Los Angeles	\$5.00	\$4.00	\$3.20	\$2.50	\$1.50	\$0.80	\$5.00
Minuet	\$100.00	\$80.00	\$60.00	\$50.00	\$32.00	\$24.00	\$250.00
Moody, Dr.	\$300.00	\$250.00	\$200.00	\$150.00	\$100.00	\$80.00	
Nixie		\$20.00	\$16.00	\$10.00	\$7.00	\$4.00	\$25.00
Opalescent	\$6.00	\$5.00	\$4.00	\$2.40	\$1.60	\$0.80	\$4.00
Orange Queen	\$5.40	\$4.00	\$3.20	\$2.50	\$1.80	\$1.00	\$5.00
Orchid, The			\$50.00	\$40.00	\$24.00	\$18.00	\$60.00
Pearl of Calif.	\$100.00	\$80.00	\$60.00	\$50.00	\$32.00	\$24.00	
Peters, Mrs. F. C.			\$3.20	\$2.40	\$1.60	\$0.80	\$4.00
Pfitzer, Paul	\$64.00	\$50.00	\$40.00	\$24.00	\$16.00	\$10.00	
Phaenomen	\$24.00	\$20.00	\$15.00	\$12.00	\$6.00	\$4.00	
Phipps, Mr. W. H.	\$20.00	\$16.00	\$12.00	\$9.00	\$6.00	\$3.00	\$18.00
Purple Glory	\$6.40	\$5.00	\$4.20				
Quaker Maid	\$8.00	\$6.60	\$5.00	\$4.00	\$2.50	\$1.20	\$6.00
Queen of Night			\$20.00	\$16.00	\$10.00	\$6.00	
Rose Mulberry	\$60.00	\$44.00	\$30.00	\$20.00	\$15.00	\$12.00	
Salmon Glow			\$5.60	\$4.00	\$2.40	\$1.80	\$9.00
Sisson, Mrs. F. W.	\$48.00	\$40.00	\$30.00	\$22.00	\$12.00	\$8.00	\$55.00
Sonnenberg	\$100.00	\$80.00	\$60.00	\$50.00	\$32.00	\$24.00	
Sovereign	\$14.00	\$10.00	\$7.00	\$5.00	\$3.60	\$2.40	\$12.00
Swartley, Ellz.		\$20.00	\$16.00	\$10.00	\$8.00	\$6.00	\$14.00
Theda	\$4.00	\$3.20	\$2.40	\$1.80			\$2.00
Triumph, Pfitzers	\$120.00	\$110.00	\$80.00	\$60.00	\$40.00		
Velled Brilliance	\$50.00	\$40.00	\$30.00	\$20.00	\$15.00	\$10.00	\$160.00
Vellchenblau	\$50.00	\$40.00	\$30.00	\$20.00	\$16.00	\$11.00	\$120.00
Victor		\$20.00	\$16.00	\$10.00	\$6.00	\$3.60	\$6.60
Wood, Mrs. John S.	\$6.60	\$5.40	\$4.80	\$3.60			
Yellow Wonder	\$33.00	\$27.00	\$20.00	\$14.00	\$11.00	\$7.00	\$45.00
Zang, Tycko	\$10.00	\$8.00	\$6.00	\$3.00			\$7.00

NOTE:—In event of shortage, retail orders take precedence over wholesale.

Lily Pools, Rock Gardens and Hardy Perennials

are not difficult. The pool and the rockery add an indefinable charm to the garden; and are not necessarily expensive. The two form a combination of bewitching beauty. If space is limited a Water Lily may be grown in a tub. This book tells how to make and what to grow in them.

Hardy Perennials are the backbone of the garden; once planted they grow every year without further planting. They include Peonies, Iris, Lilies, Chrysanthemums, Delphiniums, Phlox, Daisies, etc. This book lists and describes nearly 300 hardy perennials and more than 250 flowers that are annual or biennial. Also gives correct pronunciations of practically every flower grown.

It contains special articles on Peonies, Iris, Lilies, Gladiolus, Gladiolus Bulblets and Shrubs. Tells how to prepare the soil, fertilize, plant, cultivate, mulch, water, hybridize and how to harvest and store bulbs.

Flowers for the Beginner is a helpful chapter in which is listed and described those plants easiest grown from seed and which make good cut flowers.

"How to Grow Fine Flowers" is a 200-page book, beautifully bound in cloth, and written by E. H. and R. T. Wilson who have had more than thirty years experience as growers of fine flowers. The book will save many times its price; also makes a fine and useful present for a flower loving friend. Price postpaid, \$2.50.

J. D. LONG SEED COMPANY
Boulder, Colorado

40 PAGE BOOKLET FREE WITH EARLY ORDERS

As many of you know, I did a lot of "Rambling" last summer. Went to Los Angeles to help judge at the annual Glad show there in June. Then in August I was called to Toledo, Ohio, to judge at the National Glad show. My June trip took in a lot of territory, from Tiajuana, Mexico to Seattle, Washington. The eastern journey included a number of side trips also.

Last fall I wrote up an account of these trips in form of a booklet about 4 x 6 inches, of 40 pages, entitled, "RAMBLING REMARKS OF A RESTLESS ROVER."

A copy of this booklet was sent to each customer who ordered from last fall catalogue. Had several thousand extra copies printed. These extra copies will be sent to those who order early enough from this spring catalogue. When the edition of "Rambling Remarks" is exhausted there will be no more.

(OVER)

Believe you will enjoy taking those trips with me. Some have written that they sat up until midnight reading the booklet.

Now I can't tell you how long this supply of booklets will last. Judging from last year's orders we should be able to send a booklet to all who order in February and perhaps the first week or so in March.

The earlier your order is received, the more likely you are to get the booklet. With every order amounting to \$2.00 or more I will send a booklet as long as they last.

J. D. Long, Manager
J. D. LONG SEED COMPANY
Boulder, Colorado

(OVER)

"J. D. Sez, Sez 'e"



I don't know just who this joke is on. As all my old customers and friends know, for years I've taken from four to six pages of my spring catalogue for informal talks, in addition to those given in back of the catalogue under title, "OVER THE BACK YARD FENCE".

Those back yard garden talks will be found there as before. I don't change them often, or very much

at any time, because they cover the main points and I don't know what better I could tell you in that much space. Some of you who have been getting the catalogue for years haven't read all those talks yet. Every year many new prospects are added to my mailing list, so the talks will be new to them.

But here's the joke: I gave so much space to descriptions, pictures and additional garden suggestions here and there throughout the catalogue that I almost talked myself plumb out of any space for these informal, happy-go-lucky remarks about various things, often having no connection whatever with gardens or selling you seeds, bulbs and plants. Looks now like I'll be lucky if I have this one whole page for just a little visit.

Catalogue Comes of Age

This 1929 edition of my spring catalogue is the 21st "volume" or whatever you care to call it. First catalogue, a funny little effort, was printed spring 1908. Perhaps you may take issue with me and say the catalogue came of age three years ago. But so long as it is a "mail" order catalogue I contend that it had to wait 21 years before being old enough to vote. On the other hand, of course, all my catalogues are so "talkative" that you may be right after all!

Anyhow, I've been right here on the job 21 years, studying the wants and needs of my customers, and how to serve them satisfactorily. If I can't satisfy and please you by this time I'd better call everything off and quit. But I have made no plans whatever for quitting. Sure have a dandy stock of seeds, bulbs, etc., provided for your spring needs. And an organization of experienced and willing assistants to deliver the goods.

Yes, every winter now for 21 years I've prepared the copy for my little old home-grown catalogue. And for 21 years the News-Herald print shop, right next door to our seed store, has printed these spring catalogues, without a miss. And during all these years I have seldom, if ever, asked for a price on the job in advance. I tell "Russ" Thompson, the manager, that there's no knowing how many changes I may want to make up to the last minute; that after the job is completed he will know what he needs to charge me and make a reasonable profit. It's fine to do business that way when neither party thinks of taking advantage of the other. Boulder is fortunate in having five print shops, any one of which can turn out a catalogue like this.

The colored covers are best prepared by shops that specialize in color work. Therefore, this pleasing cover was printed for us by the Hugh Stephens Printing Co., Jefferson City, Mo. They sure know their garden products, as you can see. I want to take this opportunity to give J. O. Bur-

detta a friendly slap on the back in appreciation of his looking after this cover job for me in the Hugh Stephens plant. He gave me wonderful service. Thanks, J. O., thanks a lot.

Ever Had Neuritis?

It's nothing to be proud of. Probably Nature's way of telling a fellow that he ought to give his body at least half the thought and care that he gives his car. Funny, isn't it, how we pore over the construction and operation and care of any auto but don't begin to know as much about how we ourselves are built, and why, or what to do in caring for this marvelous human machine, and how! And yet, we can replace parts or the whole works, of the car, but aside from false teeth, a glass eye or cork leg, can't do a great deal along that line for the body.

This neuritis was not exactly new. It was a used model, and really an old ritis, for I had it before, several years ago. This time it pounced on me early in December, just when I had to prepare copy for this catalogue. Also, when a fellow is supposed to be ever so kind and cheerful to one and all, especially around home, in order to stand in with Santa Claus, as well as do his bit toward making this annual holiday season a happy one for others.

Well, I got by, and sure had a Merry Christmas. I was amazed to receive so many cards, letters and presents from my customers, some of whom I never dreamed would have thought of me in this connection. Makes life a lot more worth living, doesn't it?

I also received dozens of suggested remedies for new and old 'ritis, just about all the way from carrying a rabbit's foot to applying to the riot zone some sort of strong horse liniment. Maybe I should have gone to a veterinary in the first place. One of the most hopeful letters said that neuritis is often like money—may leave a fellow very suddenly! I could get that wave length all right, for I know money can do that, and how.

One fortunate thing is that 'ritis is not contagious. I had it for about a month in my right side. My left side was not only exposed daily, but slept in the same bed with my right side practically every night. And never caught the 'ritis. But I must not take up more space for this. Except am glad to say that am feeling ever so much better now and think I have this pest bluffed for a while at least. Also, let me tell you this: No matter who it is, if he or she has 'ritis or any other affliction half as painful and hard on the nerves, please make a big allowance if the person seems cranky or grouchy. Sometimes I think it might be a good thing if everyone had a real snappy attack of 'ritis. We'd understand each other better, maybe.

May Be Best, After All

Maybe there's a bright and shining silver lining to my cloud,—this thing of having so little space left for talking. I really should have taken a tip and not reserved even this one page, after checking up and noting how Hoover and Smith both lost so many votes in the States where they talked. They harvested bumper crops of votes where they did not talk. Now since what I really need, in the "Long" run, is your orders with silver offerings or something just as good or better, it looks like I'm defying fate to talk at all.

LONGS Safety-First Lawn Grass Seed

It is safest and cheapest to buy the very purest and best White Clover and Blue Grass seed for your lawn, because you avoid seeding your lawn with the noxious weeds found in cheap grass seeds, and get so much higher germination that a pound of the best will cover as much as two pounds of the cheap, chaffy, low germinating seed.

Purest White Clover

Clean seed, of bright golden color and strong vitality, "rarin' to go". Sure fine. Lb., 80c; 2 lbs., \$1.50; prepaid. Five lbs.: 2nd zone, \$3.50; 3rd zone, \$3.55; 4th zone, \$3.65; prepaid. Ten lbs.: 2nd zone, \$6.50; 3rd zone, \$6.60; 4th zone, \$6.80; prepaid.

Best Kentucky Blue Grass

Very heavy and clean. Lb.: 70c; 2 lbs., \$1.25; prepaid. Five lbs.: 2nd zone, \$3.00; 3rd zone, \$3.05; 4th zone, \$3.10; prepaid.

CREEPING BENT GRASS SEED. Has fine, tough blades, hard to mow. Requires acid soil to thrive best. Turns brown at times during the season. If conditions are just right, it makes a pretty good lawn, but has been overrated. Does not choke out well-established dandelion roots and other noxious weeds. Sow pound to 300 square feet. Best European seed, \$1.25 per pound, prepaid. Ask for prices on larger lots.

Ten lbs.: 2nd zone, \$5.00; 3rd zone, \$5.10; 4th zone, \$5.30; prepaid. Write for prices on larger lots and beyond 4th zone.

Safety-First Mixed Seed

About one part white clover to three parts best blue grass. Lb., 75c; 2 lbs., \$1.40; prepaid. Five lbs.: 2nd zone, \$3.35; 3rd zone, \$3.40; 4th zone, \$3.50; prepaid. Ten lbs.: 2nd zone, \$6.00; 3rd zone, \$6.10; 4th zone, \$6.30; prepaid. Sow about pound to 300 square feet.

Meet My Glad Friend, Esther

I met her at the National Glad Show in Toledo, Ohio, last August. She brought her father and mother all the way from St. Joseph, Mo., to the Big Show. Her father, Joseph M. Lenz, 2716 Faron St., St. Joseph, Mo., is a commercial grower of glads and other flowers. And he sure grows 'em.

This picture was taken last summer when Esther was 3 years old, shortly after her birthday, July 23rd. She was 38½ inches high at the time, and just as sweet as she looks. In each hand she holds a plant of that giant glad, Mrs. Douglas. The unbloomed plant in her left hand measured 59 inches from ground to tip. The other one 54 inches. Some other Douglas plants in this patch measured nearly 6 feet. All grown from No. 3 size bulbs. Now you tell one.

Free Booklet With Glad Orders

In the fall of 1927 I wrote a 32-page handy pocket size booklet about Gladioli and how to grow them. I tried to have a copy sent to each customer who ordered glads last season, also the fall of 1928. If any of you were overlooked, please drop me a line and I'll send you one now. Have just about enough left to include with glad orders this winter and spring, 1929. May run short before end of the season. No more will be printed this spring. Possibly a revised edition next fall. Ask for copy when ordering glads if you have not had one. The earlier you order, the more likely you are to receive a copy of this valuable booklet. It's worth dollars to anyone who grows glads either for pleasure or profit, or both.

How Shall We Pronounce Gladioli?

In conversation, I sidestep the issue by just calling 'em Glads, as many others do now. It's a very appropriate name for this flower that gladdens all who grow and see it. Several years ago the Am. Glad Society voted in favor of the old pronunciation, as Glad-y-oh-lus, accent on "oh".



Business Terms—Read Before Ordering

Safe delivery guaranteed.

All goods prepaid, unless otherwise noted.

Cash with order, or C. O. D. Please do not ask for any other terms. Your check O. K. with us if O. K. at your bank.

C. O. D. orders. Bear in mind that C. O. D. orders cost you extra for collection and M. O. fees. On orders for perishable items, also heavy packages of other goods, we require one-fourth cash. Balance may be C. O. D.

Goods priced prepaid will be sent by parcel post or express, usually parcel post. If you specify a certain way and the other is cheaper, you pay the difference.

We ship promptly, or notify you if goods are to be sent later. So if you fail to receive goods or a notice within one week, please drop us a line at once. Don't wait.

I want you to report errors. Just drop me a line stating the trouble. That's enough. Don't need to sass me.

NON-WARRANTY—Owing to many conditions that may prevent the best seeds from growing and giving satisfaction, we, The J. D. Long Seed Company, therefore, in common with other seedsmen, give no warranty, expressed or implied, as to growth, description, quality, productiveness, or any other matter of any seeds, bulbs or plants that we send out, and we will in no way be responsible for the crop. If the purchaser does not accept the goods on these terms they are at once to be returned, and the money will be refunded.

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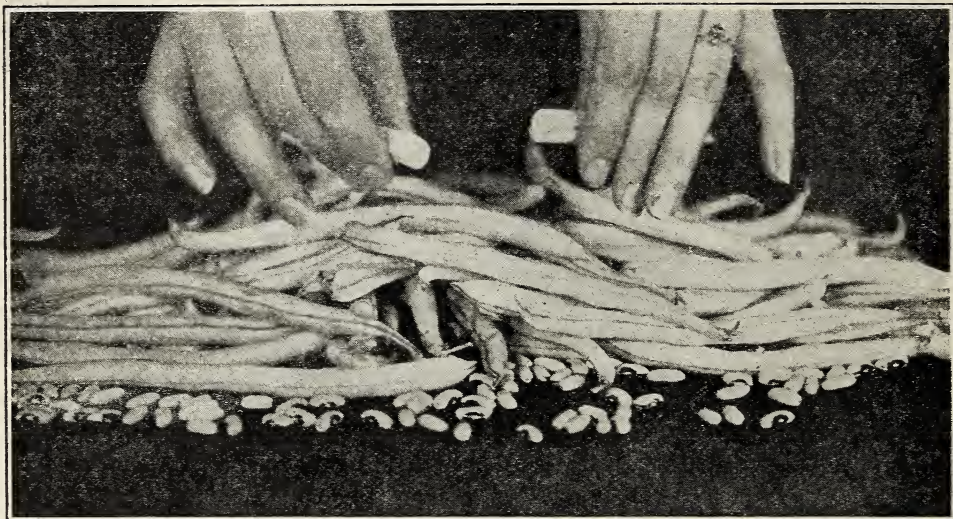
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LONG'S Beautiful, Bountiful, Brittle Beans



Two Favorites—Brittle Wax and Stringless Green Pod

V1. BRITTLE WAX. The name tells the story. If I were to suggest any other name it would be Icicle, for the pods break like icicles, with hardly ever a sign of string, even when full grown. The flavor is best ever. Yield good. What more could one wish? The long, round, fleshy pods are a beautiful yellow. Beans, long, white, with black eye. Good as shell beans also. Pkt., 10c; $\frac{1}{2}$ lb., 25c; lb., 45c; 3 lbs., \$1.25, prepaid.

V7. STRINGLESS GREEN POD. Might be called a green pod "Brittle Wax". Beans brown. Pods round and tender. Splendid flavor. Pkt., 10c; $\frac{1}{2}$ lb., 22c; lb., 40c; 3 lbs., \$1.05, prepaid.

V9. KENTUCKY WONDER POLE. The favorite pole bean. Pkt., 10c; $\frac{1}{2}$ lb., 22c; lb., 35c, prepaid.

V10. COLORADO CREAM BUTTER. (Aztec.) Immense white bean, shape of navy, with lima flavor. (Will grow tall if season wet.) Pkt., 10c; $\frac{1}{2}$ lb., 22c; lb., 40c, prepaid.

V11. HENDERSON'S LIMA. Small or "Baby Lima". Pkt., 10c; $\frac{1}{2}$ lb., 22c; lb., 40c, prepaid.

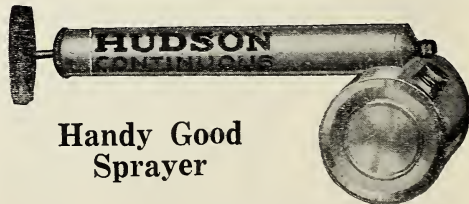
V12. BURPEE'S BUSH LIMA. Large, juicy and sweet "butter bean". Pkt., 10c; $\frac{1}{2}$ lb., 25c; lb., 45c, prepaid.

(For larger lots, see page 47.)

Beat the Bean Bugs

You can absolutely protect and save your bean crop from its one pest, the bean bug, by providing a sprayer and the right dope before the bugs appear. Be prepared. Arsenate of lead sticks to leaves best. White heliobore is also effective and is non-poisonous to people. Use tablespoon arsenate of lead to gallon of water, or somewhat more of the heliobore. **Spray early**, before the bugs get a start. Repeat several times, being sure to get the dope on the under side of the leaves, where the little woolly fellows hatch

and begin their work of destruction. Waiting to spray until your vines are riddled is like locking the garage after your Ford is stolen. Never knew of anyone being poisoned with arsenate of lead on beans, but if you want to take extra precautions, use a little vinegar in water for washing the bean pods before cooking them.



Handy Good Sprayer

Operates **continuously** on both the up and down stroke. The spray nozzle is adjustable from solid stream to a fine mist. Working parts of brass and removable for cleaning. Heavy tin, quart size. Each, \$1.00, prepaid. (3-oz. cake Tobacco Soap included free.)

LONG'S "Live Beets"

V14. EARLY WONDER. A splendid extra early variety that is meeting with great favor. This quick growing, attractive variety is of the favorite globe shape. The flesh is dark red, sweet and tender. Fine for summer and fall use, canning, or storing for winter. Select seed. Large pkt., 10c; oz., 15c.

V16. CROSBY'S EARLY EGYPTIAN. Preferred now by most gardeners to the old flat type Egyptian. Uniform turnip shape; flesh deep red; quick growing. Large pkt., 10c; oz., 15c.

V17. EARLY ECLIPSE. Similar to Early Wonder and Crosby's in season and shape, but flesh a brighter red, preferred by some. Large pkt., 10c; oz., 15c.

V18. DETROIT DARK RED. Globe shape; smooth; dark red; tops small, admitting of close planting. Good all around early, medium or late variety. Splendid for canning when small. "Can you beet it?" Large pkt., 10c; oz., 15c.

V19. BLOOD TURNIP. Discontinued. Use Detroit.

(For larger lots, see page 47.)



Mangels, Sugar Beets

Culture: Sow 4 to 6 lbs. to acre, in rows 24 inches apart. In good ground you can raise 30 to 40 tons per acre. Very valuable for feeding stock, especially milch cows. A mixture of mangels and sugar beets is good combination. Add carrots for dessert!

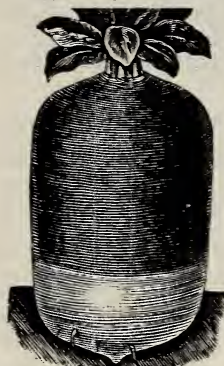


LONG'S "in-1" Vegetables

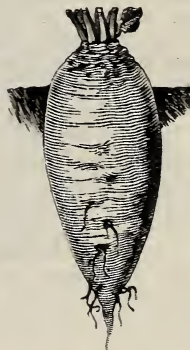
SWISS CHARD — Alias Spinach Beet, Asparagus Beet, "Chicken's Delight". Leaves may be cooked for "greens" like spinach. The stalks may be cut lengthwise and crosswise, the quartered pieces then boiled and served in butter or milk dressing like asparagus. Grow plenty and feed surplus to the chickens. They like Swiss Chard and thrive on it. Don't dig up the root or cut off all the top. Pull off the outside stalks. Others will keep forming from heart of plant. Grows in hot weather when spinach lies down on the job. Stands a lot of freezing in fall and still keeps growing. Really a wonderful vegetable. Large pkt., 10c; oz., 15c; ¼ lb., 40c.

HOW TO GROW "LIVE BEETS"

Culture: Plant any time from early spring to August. Most people make a mistake by not planting beets along in summer, as well as in spring. They come quickly, the small half-grown size being best for canning and fine for summer use also. An ounce of seed will sow 50 feet of row. Cover ¾ inch.



Golden Tankard



Sugar Beet

Prices: All Mangels, also LONG'S Special Mixture of Mangels and Sugar Beet: Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 70c; 5 lbs., \$2.75; 10 lbs., \$4.75, prepaid. Ask for prices on larger lots.

V22. MAMMOTH LONG RED. Great yielder.

V23. GOLDEN TANKARD. Roots rather short.

V24. DANISH SLUDSTRUP. Ovoid shape; reddish-yellow; heavy cropper.

V25. GIANT HALF SUGAR.

V26. WANZLEBEN SUGAR BEET. The standard sugar beet. Extra good seed; true strain. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

LONG'S Special Mixture

V27. A well-balanced mixture of Mangels and Sugar Beet, for milk cows. Mixed by myself from our tested seed. Better than all Mangels or all Sugar Beet. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 65c; 5 lbs., \$2.50; 10 lbs., \$4.50.

***LONG'S* Cabbage—Best Kinds for Home and Market****Copenhagen Market—Best Early Round Head**

V31. It's growing in favor every year, not only the best Early Round Head Cabbage, but also as a splendid sort for winter, when planted a little later than the winter varieties. The dish-shaped leaves fold so lightly, and the heads are so solid, that it can be grown closer together than other kinds of equal weight. True, imported stock. Pkt., 10c; oz., 25c.

"Golden Acre"—Another Solid, Early Round Head

V32. Similar to Copenhagen, but more uniform in type, a little smaller, and somewhat earlier. Heads round, from 9 to 11 inches in diameter. Select imported seed. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c; lb., \$2.50, prepaid.

New Danish Cabbage for Home Gardens—"Baby Head"

V33. Originated by Hjalmar Hartmann of Copenhagen. A very early round head type, that takes little space for each plant. May be set as close as 8 inches apart. The heads are of medium size, just right for average family use, and exceedingly solid. Keeps well also, for an early variety. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., 90c; lb., \$3, prepaid.

Danish Round Head (Short-Stemmed Hollander)

V35. One of the best main crop varieties. Heads very solid; good keeper. This is the main variety grown by large gardeners and shippers for fall and winter use. It's the standard best late cabbage. Long's special stock Danish grown seed. Pkt., 10c; oz., 25c.

V30. ENKHUIZEN GLORY. About same season as Winningstadt, but head is round instead of pointed. Pkt., 5c; oz., 20c.

V29. EARLY JERSEY WAKEFIELD. Small, pointed head. Pkt., 5c; oz., 20c.

V28. WINNINGSTADT. Heads firm, slightly pointed; early sort, but good also for winter. Pkt., 5c; oz., 20c.

V34. LATE FLAT DUTCH. Very large. Pkt., 5c; oz., 20c.

V36. MAMMOTH ROCK RED. Large red cabbage. Pkt., 5c; oz., 20c.

V37. SAVOY CABBAGE. Leaves beautifully crimped. Fine flavor. Pkt., 5c; oz., 20c.

V38½. BRUSSELS SPROUTS. Miniature cabbages; grow closely on stalks. Pkt., 5c; oz., 30c.

V39½. CHINESE, or CELERY CABBAGE. Early plants often run to seed. Sow in June. Tie up like cauliflower to blanch. Pkt., 10c; oz., 35c.

For Larger Lots of Cabbage, See Page 47

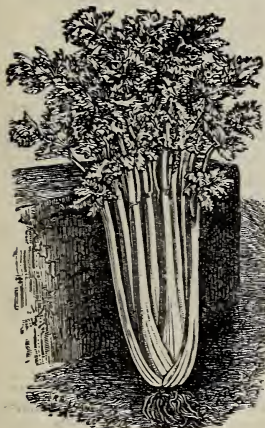
LONG'S Cauliflower

V38. EARLY SNOWBALL. (Henderson's strain.) Early and main crop variety.

V39. DEY WEATHER. Very large, and fine white heads. Resists drought well. Some gardeners prefer this to Snowball and grow it exclusively.

Price for either variety: Pkt., 10c; ¼ oz., 50c; ½ oz., 90c; oz., \$1.50; ¼ lb., \$5.50.

No Cauliflower Plants by Mail

LONG'S Celery

Culture. Sow in protected bed; sow thin and cover lightly. Transplant in June. Ask your County Agent or Agricultural College for special information on celery growing.

V44. GOLDEN SELF - BLANCHING. One of the best early kinds for fall use. Pkt., 10c; ½ oz., 30c; oz., 45c.

V46. GIANT PASCAL. The best late celery for winter use. May be blanched in garden, but to get those brittle sweet white stalks it

should be taken up, trenched or banked up in cellar. Pkt., 10c; ½ oz., 25c; oz., 40c.

V45. WHITE PLUME. Preferred by some to Self-Blanching. Fall variety easily blanched. Pkt., 5c; ½ oz., 25c; oz., 45c.

V46½. GIANT PASCAL, Special Stock. Re-selected. Fine. Pkt., 20c; ½ oz., 40c; oz., 70c.

V47. CELERIAC. For seasoning meats and soups, also for salads. Grown exclusively for its turnip-shaped roots. Pkt., 5c; oz., 25c.

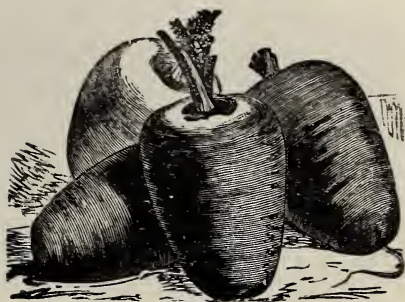
Washington Asparagus

Seed: Pkt., 10c; oz., 20c; ¼ lb., 75c.

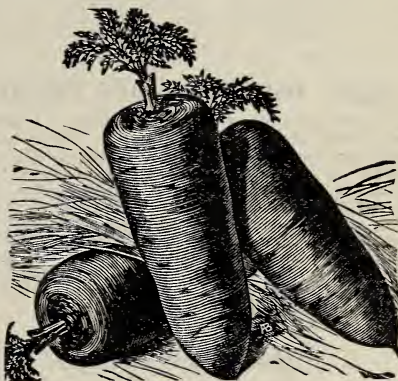
Roots: 15 for 50c; 40 for \$1.00; 100 for \$2.00; prepaid.

LONG'S Best Four Carrots

(For larger lots, see page 47.)



V40. OXHEART. Short but thick roots, bright orange flesh; best for heavy soil; good table carrot. Large pkt., 10c; oz., 15c.



V41. DANVERS HALF LONG. Smooth medium length, orange color roots. Small Pkt., 5c; Large Pkt., 10c; oz., 15c.

V42. CHANTANEY. Large. Similar to Danvers, but not quite so long. Splendid table carrot. Small Pkt., 5c; Large Pkt., 10c; oz., 15c.

V42½. NANTES. An extra sweet table carrot. Roots do not taper much, but are almost cylindrical, about 6 inches long, and very smooth. Flesh orange-red, very sweet, and almost without core. Just fine. Large Pkt., 10c; oz., 15c.

V43. GIANT WHITE BELGIAN. Heavy yielding stock carrot. Pkt., 5c; oz., 10c.

Parsley

Culture. Soak seed in tepid water a few hours before planting. Cover ½ inch.



V125. DARK MOSS CURLED. Fine for garnishing. Pkt., 10c; oz., 15c; ¼ lb., 50c.

LONG'S Acclimated SWEET CORN Seed



LONG'S Early "Peep o' Day"

V48. It's the early bird. Stands early planting. Originally this variety was quite small, but my Colorado grower has been selecting for size, and you will find a decided improvement in size of this favorite early corn.

LONG'S Improved Golden Bantam

V49. If you plant just one kind of Sweet Corn, then make this the one. My Colorado strain has been improved the same as my Peep o' Day, by selection year after year, so that my stock now runs considerably larger than the regular Golden Bantam. Instead of just 8 rows, many ears will have 10 and 12 rows. One of the many good points about Bantam is that the silks or "whiskers" come out easily and leave a nice clean ear for cooking, while its special advantage over other varieties always has been and always will be its sweetness. In this it delivers the goods.

LONG'S Giant Bantam

V50. Known also as Bantam-Evergreen, from crossing of these two splendid varieties, combining to a large degree the sweetness of Bantam and the size of Evergreen. Try this in place of Evergreen, or plant part each.

LONG'S Golden Cream

Another addition to the Golden Bantam family. Cross between Bantam and Country Gentleman, having size, deep grains and zig-zag appearance of the latter, but more the color of Golden Bantam.

V53. **STOWELL'S EVERGREEN.** The standard big late Sweet Corn.

V54. **COUNTRY GENTLEMAN.** Tall, late, very sweet, with grains set zig-zag.

Several varieties discontinued. "Plant the best. Forget the rest."

Prices: SWEET CORN in this column: Large pkt., 10c; ½ lb., 18c; lb., 30c. Prepaid. For larger lots, see page 47.

Minnesota No. 13 Seed Corn

We do not handle field seeds, but specialize in seeds, plants, bulbs and roots for gardens and lawns. Write to J. A. Gilfillan, Route 3, Fort Lupton, Colo., for prices on his dry land grown "Pioneer" strain of Minn. No. 13 seed corn, and his stock of U. S. 113 corn.

New Variety Sweet Corn "Early Sunrise"

Ever notice that when a new golden grained sweet corn is introduced it is likely to be compared with Golden Bantam? Just shows how deservedly popular Golden Bantam is with millions of gardeners.

Now this new "Early Sunrise" is similar to Golden Bantam in color and delicious flavor. Fully as large as the original Bantam, but earlier. Originated way up in North Dakota by Prof. Yeager of the N. D. Agricultural College.

Finest Colorado grown selected seed: Pkt., 10c; ½ lb., 20c; lb., 35c; 5 lbs., \$1.60; 10 lbs., \$3.10, prepaid.

LONG'S Japanese Rice Pop Corn



Ears are short and "stubby," but so "heavy set" or big around that the yield is something astonishing. Each stalk has several good ears. Some ears have 32 rows. Grains very deep and slim. Hulls so thin and transparent that the Pop Corn just melts in your mouth.

Price: Pkt., 10c; ½ lb., 15c; lb., 30c, prepaid.

Two Other Good Kinds

V56. **WHITE RICE.** Small pointed grains. Kind used by the Pop Corn wagons in cities. Pkt., 5c; ½ lb., 15c; lb., 25c. Prepaid.

V57. **MAMMOTH WHITE, or SPANISH.** Extra large, sweet and tender. Great seller. Usually sells on cob in grocery stores. Extra early. Pkt., 5c; ½ lb., 15c; lb., 25c. Prepaid.

MUSTARD

V123½. **OSTRICH PLUME.** Leaves long, ruffled and curved. Cook it like spinach. Pkt., 5c; oz., 10c; ¼ lb., 30c.

LONG'S Cucumbers—Best Pickling and Slicing Kinds

V66. "LONG'S LONG LONGED-FOR LONGEST LONG GREEN." Extra long variety of beautiful appearance and splendid flavor. For pickles or slicing. For home or market. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c.

Prices: All CUCUMBERS (except V66) at: Small Pkt., 5c; Large Pkt., 10c; oz., 15c. For larger lots see page 47.

V61. EARLY FORTUNE. Fine for pickles when small, and good slicer.

V62. EARLY WHITE SPINE. An old favorite; still good.

V60. KLONDIKE. Very early white spine.

V63. BOSTON PICKLING. Standard for pickles. Same as Chicago Pickling.

V64. IMPROVED LONG GREEN. Always good.

V65. DAVIS PERFECT. So nearly perfect in shape it often brings extra price.

V67. WEST INDIA GHERKIN. Very small prickly sort, for pickles only. Use when quite young. Pkt., 5c; oz., 25c.

LONG'S Head Lettuce

Prices: All varieties LETTUCE (except V72): Small Pkt., 5c; Large Pkt., 10c; oz., 15c. For larger lots see page 47.

V70. IMPROVED HANSON. Good heading variety and may also be used as leaf lettuce when young.

V71. ICEBERG. Similar to Hanson. Crisp and tender. Fine as leaf lettuce also.

V73. BIG BOSTON. Popular market variety.

V74. MAY KING. Extra early.

V75. DENVER MARKET. Rather loose head; leaves light golden green, beautifully savoyed or crimped.

V76. EARLY PRIZE HEAD. Forms large loose head. Leaves crimped; tinged brownish-red. Tender, crisp and sweet.

V79. COS, or CELERY LETTUCE. Do not confuse with celery cabbage. It is one of the surest blanching varieties, of elongated or cone-shaped form.

Mountain Head Lettuce**LONG'S Special Stock**

V72. NEW YORK. Also called Los Angeles, Wonderful, Mountain Iceberg, and Western Iceberg. May have several more names, for all I know.

Don't pay extra for new, high sounding names. If you want to grow the best head lettuce of this type, then get the best seed of the genuine New York, no matter whether it is listed as this or given some new name.

Many large growers of head lettuce prefer old seed.

1928 CROP SEED. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 70c; lb., \$2.25.

1927 CROP SEED. Pkt., 12c; oz., 30c; $\frac{1}{4}$ lb., 80c; lb., \$2.50.

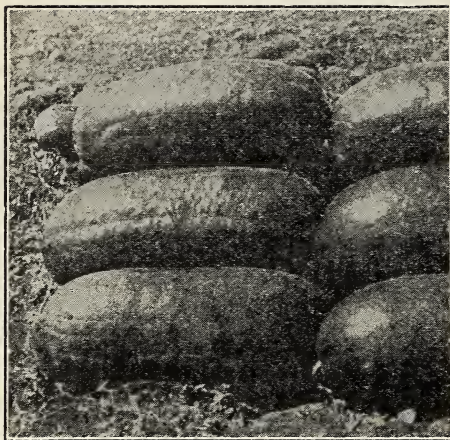
Write for Prices on Larger Lots

For years I've supplied many of the largest and most successful growers of Colorado Mountain Head Lettuce with this special high grade strain. It is grown for me by a lettuce seed grower in California who has specialized in this for 16 years, and developed an ideal type that is demanded by successful growers.

LONG'S Leaf Lettuce

V77. BLACK SEEDED SIMPSON. Grows quickly, making fluffy loose bunch of tender creamy leaves of delicate flavor. Fine.

V78. GRAND RAPIDS. Makes large compact bunches of light green leaves with fringed edges. The kind to grow in hothouses and hotbeds or coldframes. Splendid for open garden also.

Long's Water Melons

V92. KLECKLEY'S SWEET. The skin is dark green, flesh bright scarlet, ripening close to the skin. Seeds lie close to rind, leaving a large solid heart which does not crack open when ripe. The scarlet flesh is sweet and sugary and of such texture that it leaves no strings of pulp whatever in eating. Large pkt., 10c; oz., 15c.

V93. TOM WATSON. Similar to Kleckley's Sweet, but still larger, and firmer, standing shipping and handling the best of any first-class melon. The rind is thin but tough; flesh bright red, delicious, sweet and satisfying. Large pkt., 10c; oz., 15c.

V94. ICE CREAM. Fine, very sweet, early melon for home, or home market. Will not stand rough handling or shipping. Large pkt., 10c; oz., 15c.

V95. IRISH GRAY. Large long melons with gray skin. Flesh firm, crisp and sweet. Shell tough, standing rough handling in shipping. Large pkt., 10c; oz., 15c.

Long's Musk Melons

V80. ROCKY FORD. The original, well-known, green meated strain. Small Pkt., 5c; Large Pkt., 10c; oz., 15c.

V83. POLLOCK No. 10-25, SALMON TINT. The best Rocky Ford cantaloupe. Heavily netted; cut with golden center, shading to emerald green near the rind. Large Pkt., 10c; oz., 15c.

V85. EMERALD GEM. Small, early salmon flesh melon, fine grained and sweet. Small Pkt., 5c; Large Pkt., 10c; oz., 15c.

V86. BUBBELL'S GEM. Larger, longer and firmer than Emerald Gem. Rather late. Small Pkt., 5c; Large Pkt., 10c; oz., 15c.

V88. HONEY DEW. Large late melon that ripens after being picked and stored, if fails to mature in field. **Salmon flesh.** Large Pkt., 10c; oz., 15c.

V89. HONEY DEW. Same as V88, but flesh green. Large Pkt., 10c; oz., 15c.

V81. BAY VIEW. Large, long, early musk melon; flesh green. Pkt., 5c; oz., 15c.

V90. GARDEN LEMON. Very small. For pickles and preserves. Pkt., 5c; oz., 20c.

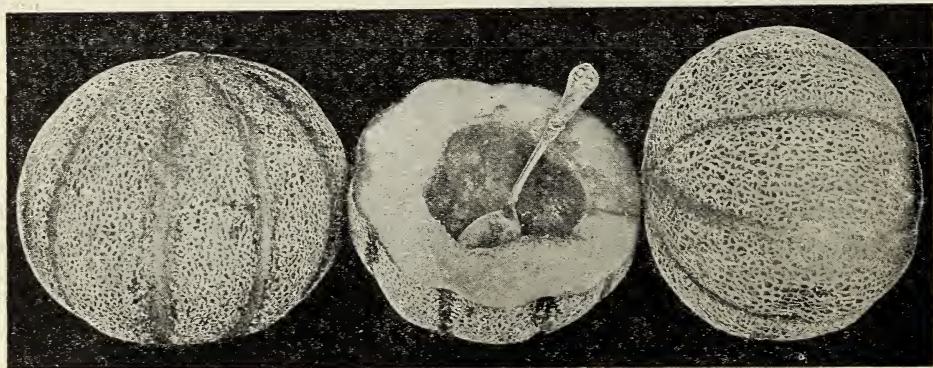
V84. COLORADO CITRON. Used for preserves. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c.

V91 $\frac{1}{2}$. ANDRUS MUSK MELON. Cross between Greeley Wonder and Bay View. Salmon flesh. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

(For larger lots, see page 47.)

Banana Muskmelon

V88 $\frac{1}{2}$. BANANA MUSKMELON. The fruits are banana shape and have a banana-like flavor. Thick salmon flesh. Pkt., 10c; oz., 15c.

**Long's Greeley Wonder Melon—"Sweet as Honey"—Sure "Yum-Yum"**

V91. This Colorado melon is a real wonder. Although earlier than the well-known Rocky Ford, it is ever so much larger, has finer flavor, weighs from 5 to 8 pounds, with record of 12 to 15 pounds at times. Has the right of way on the Northern Colorado melon market. Does well wherever melons are grown. **Salmon flesh.** Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 70c; lb., \$1.80; 2 lbs., \$3.20; 3 lbs., \$4.50; 5 lbs., \$7.00, prepaid.

Here's That Early Golden Yellow Colorado Onion

Mountain Danvers Franklin's Improved Strain

V103. Over in western Colorado, way up at an altitude of over 6,000 feet, lived a gardener with an idea. This man believed he could develop an Onion that would yield well and mature perfectly in his section, where onion growing had been given up on account of the short season. He made good. By selecting and re-selecting he finally developed "Mountain Danvers".

For years Mt. Danvers onion made a great record as a flat to medium globe, but not uniform in color or type. Then my friend, A. L. Franklin, took it in hand and by years of selection brought it up to an ideal globe of unvarying golden yellow color. The bulbs are as sound as baseballs and almost as perfect in shape—about the shape of an apple. Necks thin; few or no scallions.

Improved Mt. Danvers is extra early, often being ready for market before main crop varieties come on, when it brings much higher prices. It is also one of the best main crop kinds, keeping and shipping especially well.

Improved Mt. Danvers insures a crop in many localities where season is short and ordinary kinds would not make good. Yet it is also meeting with much favor in lower altitudes. In some localities it has been grown to weigh a pound, record yields of 600 sacks to the acre being made under ideal conditions over on the Western Slope where this onion originated.

We have a customer up in Wyoming who plants 50 pounds or so of this seed every year, growing carloads of finest golden yellow globe onions for market.

Price for true Improved Mt. Danvers seed:
Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.40.

Mountain Red Globe

Also developed by A. L. Franklin by years of selection and re-selection. An ideal globe onion, about same type as Mountain Danvers. An improvement on the well known Southport Red Globe in shape, thinner necks, uniformity of crop and earliness in maturity.

Color, deep rich red. No matter where this onion has been grown, reports from large growers are very gratifying. Early maturity combined with good yield makes it a leader.

Price for genuine Franklin grown seed:
Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 70c; lb., \$2.10, prepaid.

ONION'S Southport Yellow Globe

V105. A standard commercial or main crop variety. Oz., 20c; $\frac{1}{4}$ lb., 60c.



For larger lots, see page 47.

Yellow Globe Danvers

V106. Well described by its name, Yellow Globe. Oz., 20c; $\frac{1}{4}$ lb., 60c.

ONION'S Red Wethersfield

V99. An old red variety still popular in some sections. Oz., 15c; $\frac{1}{4}$ lb., 45c.

ONION'S Brown Australian

V100. Very solid onion of light brown color; extra early; keeps well. Oz., 15c; $\frac{1}{4}$ lb., 35c.

ONION'S Select Prize-Taker

V96. The big yellow variety, acclimated from the popular Spanish Onion. Flesh white, and milder than many other varieties. Oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.60.

ONION'S White Silverskin

V102. (Also called White Portugal and White Danvers.) Produces good medium size bulbs. Is early, mild and long keeper. Oz., 25c; $\frac{1}{4}$ lb., 70c.

ONION'S Ideal White Globe

V97. Pure white, long keeping onion that matures fairly early. Oz., 25c; $\frac{1}{4}$ lb., 70c.

ONION'S Southport Red Globe

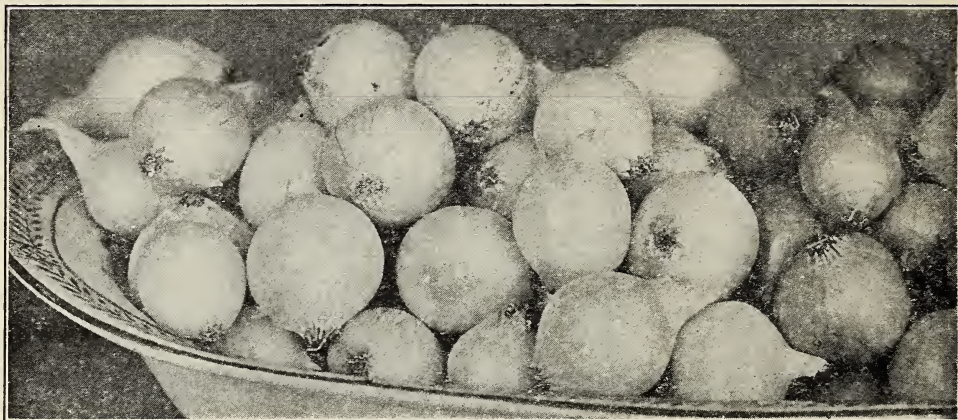
V104. Leading money maker for big onion growers in many sections. (Franklin's Mountain Red Globe still better.) Oz., 15c; $\frac{1}{4}$ lb., 50c.

ONION'S Early Barletta

V101. An early white variety used for pickling. Plant very thick. Oz., 20c; $\frac{1}{4}$ lb., 60c.

Except where noted, all ONION SEED at: Small Pkt., 5c; Large Pkt., 10c.

LONG'S Colorado-Grown "Hand-Polished" Onion Sets



That's no joke. These sets are actually hand-polished as they are rubbed by hand to remove all dirt, roots, tops and any other trash.

For a succession of fresh Green Table Onions, plant sets at different times, from early March until July.

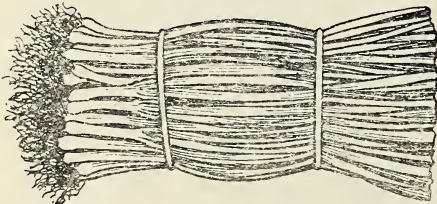
Prices for Regular Sets

	2nd Zone	3rd Zone	4th Zone	5th Zone
YELLOW.				
Quart.	\$.25	\$.26	\$.28	\$.30
4 Quarts . . . .	.85	.89	.97	1.05
8 Quarts	1.50	1.58	1.74	1.90
16 Quarts	2.70	2.86	3.18	3.50

WHITE.

	2nd Zone	3rd Zone	4th Zone	5th Zone
Quart. . . . .	.29	.30	.32	.34
4 Quarts	1.00	1.04	1.12	1.20
8 Quarts	1.75	1.83	1.99	2.15
16 Quarts	3.30	3.46	3.78	4.10

Bermuda Onion Plants



For growing green table onions, also early dry onions for fall use. Not recommended for main crop, as do not store well or keep long, like varieties usually grown from seed.

Grown in Texas, where all these plants come from. Tied in bundles of approximately 100 plants to bundle. May be more, or less, but figured 100 to bundle. 200 (smallest order packed), 50c; 500 for \$1.00; 1,000 for \$1.80; 6,000 for \$8.00, prepaid within 4th zone.

LONG'S Hazel Size Sets

Hazels are just like other bottom sets except that they run smaller in size. The smaller size not only gives you about twice as many sets to the quart as you get when buying ordinary size sets, but also gives you a better set, for this reason: A good many sets of the size usually sold, will send up a seed stalk, which causes a hard, woody center.

But with Hazel Size Sets you rarely if ever have any trouble with seed stalks. They make the finest green onions and the best of matured bulbs, and the crop is ready for market before onions from seed come in.

Prices for Hazel Sets

(About 300 to the Quart.)

	2nd Zone	3rd Zone	4th Zone	5th Zone
YELLOW.				
Quart.	\$.35	\$.36	\$.38	\$.40
2 Quarts . . . .	.66	.68	.72	.76
4 Quarts	1.25	1.29	1.37	1.45

WHITE HAZELS.

	2nd Zone	3rd Zone	4th Zone	5th Zone
Quart. . . . .	.40	.41	.43	.45
2 Quarts . . . .	.75	.77	.81	.85
4 Quarts	1.40	1.44	1.52	1.60

LONG'S "Tiny" Onion Sets

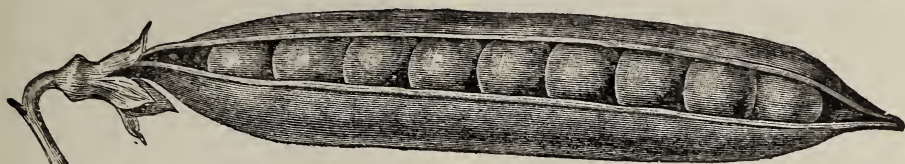
The smallest of all Onion Sets, about the size of a large garden pea. You don't need to set them, just sow in a row like peas and cover about one inch. They make early green onions a little later than regular sets and much earlier than seed. They are especially valuable for growing large dry onions for winter use. Being so small you get all the way from 600 to nearly 1,000 Tiny sets to the quart. Crop matures earlier than onions from seed.

WHITE TINY SETS: Pint, 40c; qt., 75c, prepaid.

YELLOW TINY SETS: Pint, 35c; qt., 65c, prepaid.

All sets figured at 32 lbs. to bushel (1 lb. to quart).

Popular, Profitable Peas for Particular Planters



LONG'S Large, Long, Luscious Laxtonian. Early, Too!

V406. This big, long podded, variety is ready for use as early as the small American Wonder, and only a little later than Alaska. Pods are long but vines are short. Peas are large, wrinkled, sweet, running 7 to 10 in a pod. Vines require no staking; rows may be planted close, to economize space; peas easily gathered by the handful, and the shelling of a mess is a short job, on account of the size of pods and peas. Pkt., 10c; ½ lb., 22c; lb., 40c; 2 lbs., 75c. Prepaid.

Larger Lots: Not prepaid. See page 22 regarding postage, if mailed. 5 lbs. for \$1.30; 10 lbs. for \$2.40; 25 lbs. for \$5.50. Ask for prices on any other quantity.

LONG'S Montana-Grown Early Giant Pod "Blue Bantam"

V408. Nothing small or "Bantam" about this pea but the vines, which run 12 to 16 inches according to season, soil, water and cultivation. But the PEAS! Fine big pods, usually well-filled, with large and luscious peas. So like Laxtonian in every way that it's a toss-up as to which is the better. You can't lose if you bet on either one. Pkt., 10c; ½ lb., 22c; lb., 40c; 2 lbs., 75c. Prepaid.

Larger Lots: Not prepaid. Same prices as for Laxtonian.

LONG'S Favorite Dwarf Variety for Second Early

V418. DWARF TELEPHONE. A second early pea with short to medium vine, but pods and peas large like Laxtonian and almost as large as Tall Telephone. Just a little later than Laxtonian. One of the best. Pkt., 10c; ½ lb., 20c; lb., 35c; 3 lbs. for \$1.00. Prepaid.

Larger Lots: Not prepaid. See page 22 regarding postage, if sent by mail. 5 lbs. for \$1.20; 10 lbs. for \$2.15; 25 lbs. for \$4.75. Ask for prices on any other quantity.

Seven Other Good Kinds

V410. ALASKA. Early smooth pea, standing early planting, but hard to sell after the larger sorts come in a little later. Pkt., 10c; ½ lb., 18c; lb., 30c.

V412. AMBER, or GIANT ALASKA. Almost as early as Alaska, but much larger and better; is also smooth seeded, and will stand early planting. Pkt., 10c; ½ lb., 18c; lb., 30c.

V422. EDIBLE POD. Dwarf Gray Sugar. Pods as well as peas are cooked, like snap beans. Pkt., 10c; ½ lb., 18c; lb., 30c.

V426. EVERBEARING (Bliss). A later sort that continues bearing for a long time, though most other mid-season kinds do also. Pkt., 10c; ½ lb., 18c; lb., 30c.

V428. GRADUS. Called also Early Telephone. Tall vines, large pods and peas. Pkt., 10c; ½ lb., 20c; lb., 35c.

V432. LITTLE MARVEL. Early; vine short; pods not large but always packed tight. Pkt., 10c; ½ lb., 20c; lb., 35c.

V436. TALL TELEPHONE. Very tall; pods very large. Pkt., 10c; ½ lb., 20c; lb., 35c.

PETER PAN. Same as Laxtonian.

Culture Suggestions: Peas grow and attain the stage just fine for "green peas" with so little care that they should be planted liberally. The plants store nitrogen in the soil for the crop to follow, and there is plenty of time to grow radishes, turnips, lettuce, beets, etc., after the peas have been used.

Bear this in mind. The smooth varieties, like Alaska and Ameer, may be planted very early, even in February if soil permits. They seldom, if ever, rot in the cold, wet ground. Because of this these kinds are valuable. They deliver the goods early. But the wrinkled kinds—Laxtonian, Blue Bantam, Dwarf Telephone—in fact, all the others in my list, are sweeter and should be planted fairly early. A long spell of cold, wet weather in early spring may cause the seed to rot, but this seldom happens. Your largest plantings should be of these wrinkled, sweet-er kinds.

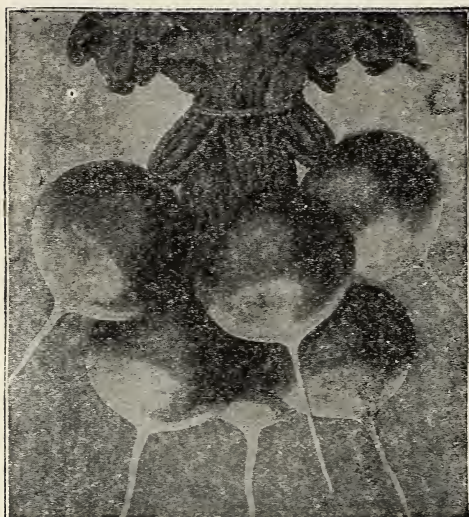
Peas thrive best in the cooler early months of the season, and do not do very well from late plantings. Beans like hot weather but peas prefer it cooler. So plant liberally early in spring.

Sow rather thick, using a pound to about 125 feet of row, though thinner may be best if shy on moisture.

ALL PEAS prepaid at these prices.

For larger lots, see page 47.

LONG'S Crisp Radishes for Home and Market



V135. EARLY SCARLET TURNIP, WHITE TIP. Quick growing variety, very attractive for bunching account rich red color, except bottom, which is white, as illustrated above. Large pkt., 10c; oz., 15c.

V137. GLASS, or CINCINNATI MARKET. Corresponds to Icicle, but color is red. The best long red. Pkt., 5c; oz., 10c.

V138. FRENCH BREAKFAST. An old favorite of the half long type. Color red, shading to white at base. Soon gets pithy. Pkt., 5c; oz., 10c.

V139. SAXA. New. Exceedingly early bright scarlet round radish, with few leaves. Flesh snow white; very mild. Follow with Crimson Giant, which is a little later and keeps tender long time. Pkt., 10c; oz., 15c.

V140. WHITE STRASBURG. Similar to Icicle but larger and later. Pkt., 5c; oz., 10c.

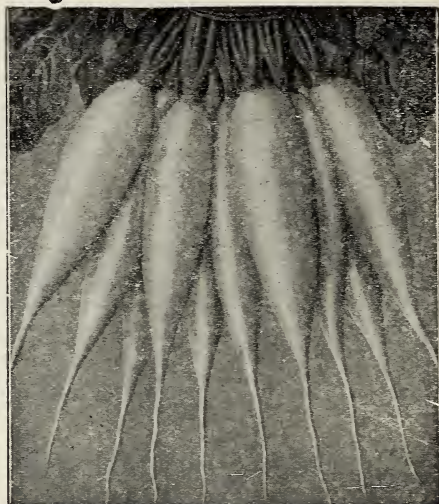
V141. CRIMSON GIANT. Here's a hummer! Round, bright red, growing quickly to bunching size, but will keep right on growing to large size without losing its crispness. I plant Crimson Giant and Icicle from early spring until September and we have fresh, crisp radishes all summer and until late in fall. Select seed. Large pkt., 10c; oz., 15c.

For larger lots, see page 47.

LONG'S Vegetable Oyster



V176. Good substitute for oysters. Sow where may remain until late in fall, or may be left in ground and dug as needed in winter. Large pkt., 10c; oz., 20c; ¼ lb., 60c.



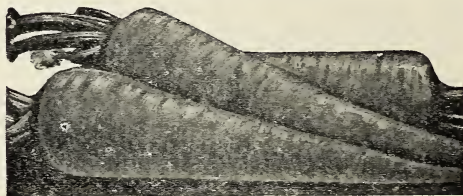
V136. WHITE ICICLE. Not in a thousand years could you think of a better name for this popular radish. The name just fits. Is one of the earliest long radishes, good for sowing every few weeks from early spring until September. My stock of this is very fine. Large pkt., 10c; oz., 15c.

V142. CHINESE ROSE (Winter). Pink, oval or half long. Pkt., 5c; oz., 10c.

V143. WHITE CHINESE (Winter). Very large, mild and juicy. Extra fine. Pkt., 10c; oz., 15c.

For larger lots, see page 47.

LONG'S Parsnips



Culture: Sow early in deep mellow soil, pressing soil after planting.

V126. HOLLOW CROWN. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 70c; 5 lbs., \$3.00, prepaid.

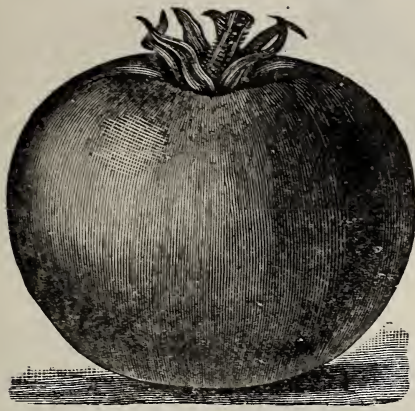
LONG'S Pumpkins

For larger lots, see page 47.

V132. SMALL SUGAR. The good old yellow pie pumpkin. Pkt., 10c; oz., 15c.

V133. LARGE FIELD. Pkt., 10c; oz., 15c.

V134. KING OF MAMMOTHS. Largest of all pumpkins, yet good for pies as well as for stock. Pkt., 10c; oz., 15c.

LONG'S Select Tomatoes**LONG'S Early Red Head**

Culture: Sow the seed in boxes in the house or in hot bed 6 to 8 weeks before time to set out. Failure to germinate seed is often due to lack of heat. **Tomato seed must be kept warm** to start it. (Same with pepper seed.) If come up thick, thin them at once. "Damping off" is a common trouble and is due to plants being too thick, watered too much, and lacking enough fresh air. When plants have 4 leaves transplant to shallow boxes or cold frames. Gradually harden them off by exposing to outdoor air to get stalky, sturdy plants.

Set plants 3 to 4 feet apart in the garden, water moderately; cultivate well.

Except where noted, all **TOMATO SEED** at 5c for small pkt.; Long's special pkt., 10c.

V154. EARLIANA. Is somewhat small, but earliest of all. Select seed. $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1; lb., \$3.50.

V159. NEW BURBANK. Another good, early tomato. Pkt., 10c; $\frac{1}{2}$ oz., 40c; oz., 75c.

No Tomato Plants by Mail.

V160. Red Head is a "Red that is Red," real early tomato of medium size, almost round, solid and smooth and of good flavor. Sets heavy, and keeps right on bearing during the whole season. As I've often remarked, some vines often so loaded that it looks like a bucket of tomatoes had been poured around the plant. Pkt., 10c; $\frac{1}{2}$ oz., 35c; oz., 60c; $\frac{1}{4}$ lb., \$1.80.

V155. BONNY BEST. Bright scarlet. Few days later than Earliana, but larger and smoother. Good for early medium and late. $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1; lb., \$3.50.

V156. CHALK'S EARLY JEWEL. Deeper red than Earliana, larger and very good. $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

V157. LIVINGSTON'S BEAUTY. Medium early, smooth, prolific, purplish red. Standard main crop variety. $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

V162. PONDEROSA. Largest of all tomatoes sometimes rough, few seeds. Pkt., 10c; $\frac{1}{2}$ oz., 25c; oz., 45c; $\frac{1}{4}$ lb., \$1.20.

V163. NEW JOHN BAER. Similar to Chalk's Jewel. Highly recommended by our Agricultural College. $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

V164. YELLOW PEAR. Small pear-shaped tomato for preserving. $\frac{1}{2}$ oz., 25c; oz., 45c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

V165. GROUND CHERRY. Also called Strawberry, or Husk Tomato. Each fruit in husk. Sweet and fine for preserving or pies. $\frac{1}{2}$ oz., 30c; oz., 50c.

Tomato-Pepper

A new vegetable of exquisite flavor, combining the qualities of the pepper and the tomato. Pkt., 15c; 2 Pkts., 25c.

LONG'S Peppers—Full of Life and "Pep"

Culture: Peppers hard to germinate. Do not blame yourself, your hotbed or the seed if you fail to make them come through. Start them indoors or in hotbed. Soil must be very warm. Transplant after frost.

V127. RUBY KING. Standard sort large sweet pepper. Pkt., 5c; $\frac{1}{2}$ oz., 25c; oz., 45c.

V128. CHINESE GIANT. Larger than Ruby King; mild. Pkt., 10c; $\frac{1}{2}$ oz., 35c; oz., 65c.

V129. LONG RED CAYENNE. Pkt., 5c; $\frac{1}{2}$ oz., 20c; oz., 40c. "Full of pep."

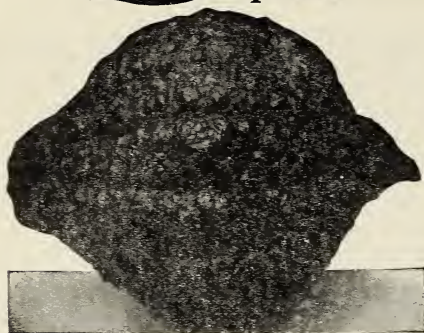
V129½. RED CHILL. Small, red, very hot. Pkt., 10c; $\frac{1}{2}$ oz., 25c; oz., 45c.

V130. PERFECTION PIMENTO. Sweetest and mildest of all peppers. Flesh very thick. Pkt., 10c; $\frac{1}{2}$ oz., 30c; oz., 60c.

V131. NEAPOLITAN. Earliest of all red mild peppers; fruit grow upright. Pkt., 5c; $\frac{1}{2}$ oz., 20c; oz., 40c.

V131½. NEW ROYAL KING. Similar to Ruby King but larger and flesh much thicker. Superior to Ruby King. Pkt., 10c; $\frac{1}{2}$ oz., 30c; oz., 50c.

No Pepper Plants by Mail

LONG'S Squash

All SQUASH: Large Pkt., 10c; oz., 15c.

For larger lots, see page 47.

V149. TRUE HUBBARD. The good old green, solid, hard shell, long keeping, fine flavored kind that melts in your mouth.

V150. SWEET POTATO. (Pike's Peak or Sibley.) Large oval squash, tapering at blossom end. Skin olive-green. When baked, resembles sweet potatoes.

V151. DELICIOUS. Varies in form and color, but always good.

V152. WHITE BUSH SCALLOPED. For summer use.

V153. GIANT CROOKNECKED. Best of summer squashes.

V154. BANANA. As name implies, this is a long squash. When baked, the thick golden meat is indeed delicious.

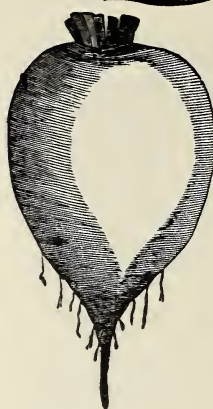
V155. New Table Queen or Acorn. Small but very prolific. Shape suggest name, Acorn. Size, 5 to 6 in. long; 4 to 5 in. across. Flavor splendid. Table Queen usually has thin, dark green shell but color varies. Can be baked or boiled in 20 minutes. Served in halves it is most attractive and delicious. Early, yet stores well. Best of all, is far less subject to insect pests than other squashes. Pkt., 10c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

LONG'S Spinach

V145. BLOOMSDALE, SAVOY LEAVED. One of the best early varieties. Pkt., 5c; oz., 10c.

V146. MONSTROUS-LEAVED VIROFLAY. Vigorous growing early kind with large, thick dark green leaves. Pkt., 5c; oz., 10c.

For larger lots, see page 47.

LONG'S Turnips

Culture: Turnips do best in rich, loose soil, but thrive under less favorable conditions. May be sown from early spring until August. For main crop for winter use, sow in July.

V169. Early Snowball. Small, pure white, round, extra early; very tender and sweet. Ideal early table turnip.

V170. EXTRA EARLY PURPLE TOP MILAN. The earliest of all turnips. Medium size. Somewhat flat.

All at: Pkt., 5c; Large Pkt., 10c; Oz., 15c.

V171. EXTRA EARLY WHITE MILAN. Similar to V170, but pure white.

V172. PURPLE TOP STRAP LEAVED. Good for early or main late crop. Grows to large size.

V173. WHITE EGG. Quick growing, egg-shaped, pure white variety, for spring or summer growing. Good size.

V174. PURPLE TOP GLOBE. Similar to White Egg in shape but with purple top. Superior to the old Purple Top Strap, which is flat.

V174½. AMBER GLOBE. Another good globe about same shape as White Egg, but color nearly yellow. Seems to do especially well in the mountains.

For larger lots, see page 47.

LONG'S Best Rutabaga

V175. AM. PURPLE TOP. Color purple above and yellow under the ground. Flesh yellow and solid; few leaves and small neck. Pkt., 5c; large pkt., 10c; oz., 15c; ¼ lb., 30c; lb., 80c.

"King of Denmark" Spinach

A new variety from Denmark that has the good qualities of such sorts as Bloomsdale and Viroflay, being similar in growth and appearance, but far superior in that it does not run to seed so quickly. Makes a quick growth of dark green leaves, large and attractively crumpled. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c; 5 lbs. for \$2.25.

LONG'S Leeks

V788. LEEK. Pkt., 5c; oz., 25c; ¼ lb., 75c.

Okra, or Gumbo

The green pods are used in soups, to which they impart a rich flavor. Sow in open garden but not until ground is warm. Thin to 10 inches. Pkt., 5c; oz., 15c; ¼ lb., 40c.

LONG'S Larger Lots at Lower Prices

Everything except Peas, Beans and Sweet Corn is priced prepaid parcel post. In ordering Peas, Beans and Sweet Corn, add for each pound: 1c for 2nd zone; 2c for 3rd; 4c for 4th; 6c for 5th; 8c for 6th; 10c for 7th; 12c for 8th. I will pay whatever additional postage may be required above these amounts.

BEANS: (Postage extra. See above.)

Brittle Wax: 5 lbs. for \$1.75; 10 lbs. for \$3.25; plus postage.

Stringless Green Pod, Ky. Wonder, Henderson Lima, Cream Butter, 5 lbs., \$1.40; 10 lbs., \$2.50, plus postage. See rates above.

B. Bush Lima: 5 lbs., \$1.70, plus postage.

BEETS

All Beets: ¼ lb., 35c; lb., 90c; 5 lbs. for \$3.80.

CABBAGE

Copenhagen Market and Danish Roundhead, select European grown seed: ¼ lb., 75c; lb., \$2.00; 5 lbs., \$8.80.

All other Cabbage, except where otherwise priced: ¼ lb., 60c; lb., \$1.40; 5 lbs. for \$6.50.

CARROT

All Carrots: ¼ lb., 35c; lb., \$1.00; 5 lbs. for \$4.00.

SWEET CORN: (Postage extra. See above.)

All varieties except "Sunshine": 5 lbs. for \$1.00; 10 lbs. for \$1.90; plus postage.

POP CORN: (Postage extra.)

Japanese Rice: 5 lbs. for \$1.20; 10 lbs. for \$2.00. Others same price as Sweet Corn. Postage extra.

CUCUMBER

All except V67 and V66: ¼ lb., 35c; lb., \$1.00; 5 lbs. for \$4.50.

LETTUCE

NEW YORK: See page 39.

All other Lettuce: ¼ lb., 35c; lb., \$1.00; 5 lbs. for \$4.50.

MUSK MELON

All but V91 and V91½ at: ¼ lb., 35c; lb., \$1.00; 5 lbs. for \$4.40.

WATER MELON

All varieties. ¼ lb., 35c; lb., 90c; 5 lbs. for \$3.75; 10 lbs. for \$7.00.

ONION: (Write for prices on larger lots.)

Red Wethersfield: lb., \$1.40; 5 lbs., \$6.50.

Barletta, So. Yellow Globe, Yellow Globe Danvers: lb., \$2.25; 5 lbs., \$10.00.

Silverskin and Ideal White Globe: lb., \$2.50; 5 lbs., \$12.00.

So. Red Globe: lb., \$1.50; 5 lbs., \$7.00; 10 lbs., \$13.00.

Mountain Red Globe: 5 lbs., \$9.00; 10 lbs., \$16.00.

Mountain Danvers: 5 lbs., \$11.00; 10 lbs., \$21.00.

PEAS: (Postage extra. See above.)

Gradus, Tall Telephone, Little Marvel: 5 lbs. for \$1.20; 10 lbs. for \$2.20; plus postage.

Alaska, Ameer, Edible Pod, Everbearing: 5 lbs. for \$1.10; 10 lbs. for \$2.00; plus postage.

PUMPKIN

Sugar: ¼ lb., 30c; lb., 75c; 5 lbs., \$3.25.

Field: ¼ lb., 30c; lb., 70c; 5 lbs., \$2.75.

King of Mam.: ¼ lb., 40c; lb., \$1.20.

RADISH

Crimson Giant, Early Scarlet Turnip, White Tip (Sparkler Strain), Icicle, Saxa: ¼ lb., 35c; lb., \$1.00; 5 lbs., \$4.25.

All other kinds: ¼ lb., 30c; lb., 80c; 5 lbs. for \$3.50.

SPINACH

Bloomsdale and Viroflay: ¼ lb., 25c; lb., 45c; 5 lbs. for \$1.90.

SQUASH

All except V155 at: ¼ lb., 35c; lb., \$1.00; 5 lbs. for \$4.20.

TURNIP

Purple Top Strap and Amber Globe: ¼ lb., 30c; lb., 70c; 5 lbs. for \$3.00.

All other Turnips: ¼ lb., 30c; lb., 80c; 5 lbs. for \$3.50.

Scarlet Runner Bean

Very rapid climber. One customer says it must have been Scarlet Runner bean which grew so fast and enabled Jack the Giant Killer to make his get-away. Blossoms bright red. Beans good to eat, as snap beans. Pkt., 10c; ½ lb., 25c; lb., 45c.

Mammoth Sunflower

5 lbs. at 20c; 10 lbs. at 17c; prepaid.

Pkt., 5c; lb., 25c; 5 lbs. at 20c; 10 lbs. at 17c; prepaid.

Endive

WHITE CURLED. The variety most used. Pkt., 5c; oz., 15c; ¼ lb., 35c.

BROAD LEAVED. Plain, broad leaves. Pkt., 5c; oz., 15c; ¼ lb., 35c.

Egg Plant

Culture: Start plants in box or hotbed. Do not set out until quite warm weather. Very tender. Ground should be rich.

V68. BLACK BEAUTY. Pkt., 10c; oz., 50c.

Rhubarb, or Pie Plant

Sow the seed in spring, and transplant where wanted the following spring Pkt., 5c; oz., 20c.

RHUBARB ROOTS. Each, 25c; 3 for 60c; 6 for \$1.00; prepaid.

LONG'S Kohl-Rabi

WHITE VIENNA. The best. Pkt., 10c; oz., 25c.

Kale, or Borecole

Used for greens. Pkt., 5c; oz., 15c.

LONG'S Herbs—All 10c Pkt.

*Caraway

*Catnip

*Coriander

*Dill—Oz., 15c

*Sage—½ Oz., 30c

*Pennel

*Lavender

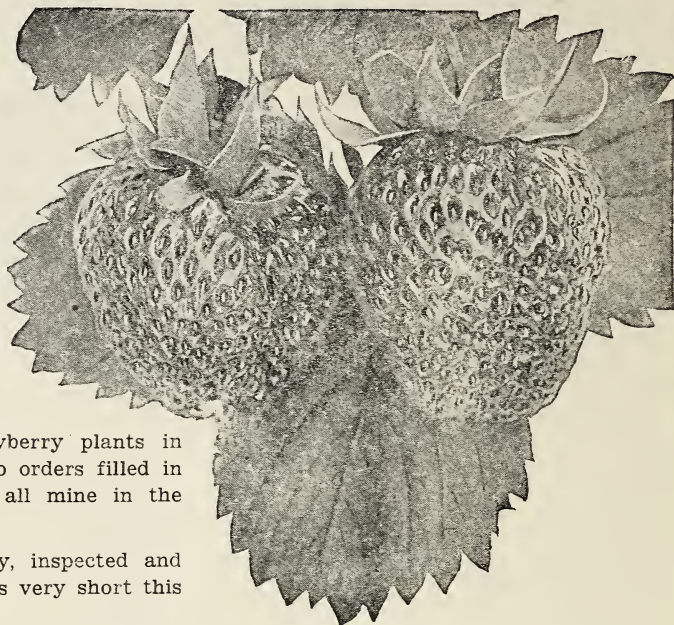
*Marjoram

*Rosemary

Savory

***LONG'S* Giant Everbearing Strawberries**

Just
Think!
Fresh
Berries
All
Summer
and Fall
From
Your Own
Garden!



We dig and sell strawberry plants in spring only. Absolutely no orders filled in summer or fall. I plant all mine in the spring.

All plants from healthy, inspected and approved fields. Supply is very short this season. Order early.

Improved Pride of Denver

The plants are remarkably vigorous, making rapid growth early the first season. Foliage strong and healthy. Stems stout, bearing clusters of large berries of excellent flavor. Everbearing. Ripe berries from middle of July to October the first year. Begin bearing earlier than Mastodon.

Pride of Denver berries are large and fine the second season as well as the first. They produce a heavy crop the second year in season with the June bearing varieties, and rival the latter in size and quality.

Prices for Pride of Denver Plants: 30 (smallest order packed), \$1.00; 100 for \$2.80; 200 for \$5.20; 300 for \$7.50; 400 for \$9.60; 500 for \$11.50, prepaid within 4th zone. Add 10% to these prices if prepaid beyond 4th zone. (Not shipped farther than 6th zone.)

Mastodon Everbearing

The berries average even larger than Pride of Denver, which is going some. Plants very robust and thrifty, and begin bearing late in July or early August

The dark-green leaves are very large and of heavy texture, thus well protecting the berries from sun and rain. The berries are borne in clusters on strong, stiff stems. Some of the larger berries will not go through the top of a quart milk bottle.

Prices for Masdoton Plants: 25 plants (smallest order packed), for \$1.00; 100 for \$2.80; 200 for \$5.40; 300 for \$7.80; 400 for \$10.00; 500 for \$12.00, prepaid within 4th zone. Add 10% to these prices if prepaid beyond 4th zone. (Not shipped farther than 6th zone.)

How To Grow Strawberries

Unless you have plenty of water, better not tackle strawberries. No one can lay down certain rules for success, but if you will turn to page 54 and read suggestions given there you will stand a good show.

How to Grow Gladioli

The gladiolus is propagated in three ways: by multiplication of the large bulbs, by the tiny bulblets that are found around base of bulbs when digging, and by saving seed that sometimes develops on top of the spike. Stock from bulbs and bulblets comes true to the original, but seed does not. I shall consider the first two ways only in this limited space. Gladioli do not mix from growing near other varieties.

WHERE, WHEN, HOW TO PLANT

Plant in any good garden soil where they will have plenty of sunshine. Don't forget that Glads love sunshine. They do best right out in the vegetable garden, or under same conditions as vegetables are grown. Plant any time from early April until June. Good idea to plant some every two weeks to keep a supply of flowers coming on all summer and fall.

They bloom in about 90 days from planting, depending on variety, vigor of bulbs, depth planted, culture, season, etc.

As I've often said, "Standing room only" is all that Glads require. Mass them in rows or beds, setting the bulbs 4 to 8 inches apart. If in rows, set double or triple rows. Dig trench, set bulbs where wanted, fill trench and job is done.

Cover small bulbs about 3 inches, larger ones 4 inches. The new bulb is formed on top of the one you plant and if too shallow your flower spikes will blow down. Deep planting saves staking. Hilling up around the plants also helps to prevent blowing over.

Cultivate between rows, and plants in the rows, often, keeping soil loose and porous. Water frequently. Glads like lots of water, but with good cultivating will get along with less water.

USE GLADS FOR CUT FLOWERS

While Glads make a nice display in the garden, yet they are much more valuable and satisfactory as cut flowers.

Cut them as soon as the lower blossom opens. Cut stem so as to leave 4 to 6 leaves on the plant to mature the bulb. Place in vase of water and the buds will open from day to day just as they would in the garden. As the lower blossoms fade, pull them off, so as to keep the bouquet looking tidy and cheerful.

Keep watering the Glad beds after flowers are cut or have quit blooming, so as to mature the new bulbs. These do a good part of their growing after flowers appear.

DIGGING AND STORING THE BULBS

After frost in the fall, dig the bulbs and cut stem off at once close to the bulb.

Save the larger bulblets of such varieties that you care the most for. Do not expose the bulbs to hot sun or frost, but they may dry a day or so in the shade. Hang up in porous bags—a common sugar or burlap bag is very good. Or, use shallow boxes. Store thus in cellar or any place where they will not freeze or get too dry.

HANDLING THE BULBULETS

Before planting remove the old bulb. Plant the bulbs and bulblets separately. Sow bulblets thick in a row like peas, 50 to a foot or two of row—and cover about one inch. Soak bulblets—not bulbs—5 or 6 days before planting. Water should be kept luke warm. Keep them thoroughly wet after planting.

These bulblets will make small bulbs by fall, which, planted again the next spring, will mostly bloom and all should make ideal bulbs for the year after that.

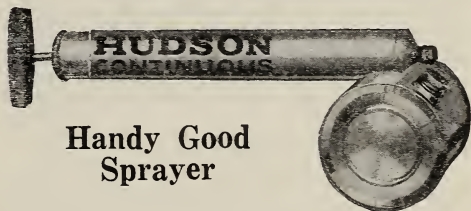
Cinnamon Vine Roots

Hardy, rapid-growing climber, covered with beautiful glossy heart-shaped leaves and a profusion of sweet-scented flowers, perfuming the air for a long distance. Plant early in April to middle of June, 6 to 10 inches apart. Lay roots flat; cover about 2 inches. Protect by mulching the first winter. Vine dies down each fall, starting again in spring. As the larger roots make the most rapid growth, I offer one size only—specially selected strong roots. 2 for 25c; doz., \$1.25; prepaid.

Long's Shasta Daisy Roots



Hardy perennial, blooming nearly all summer, the plant increasing in size and strength for several years, when the large clump then formed may be divided and reset. 2 for 50c; 5 for \$1.00; prepaid.



Handy Good Sprayer

Operates continuously on both the up and down stroke. The spray nozzle is adjustable from solid stream to a fine mist. Working parts of brass and removable for cleaning. Heavy tin, quart size. Each, \$1.00, prepaid.

SULPHO TOBACCO SOAP—Much used for spraying roses, sweet peas and many other plants. Is a contact spray for lice. 3-oz. cake, 10c; 8-oz. cake, 25c. Add 5c, either size, for mailing.

ARSENATE OF LEAD—This, also Paris green, and "Black Leaf 40", can most likely be bought from your local dealer to best advantage, as both not mallable.

TOBACCO DUST—Scatters and drives away bugs on melons, cucumber, etc. Good idea to have this on hand. 2 lbs., 35c; 8 lbs., \$1.00; prepaid within 4th zone.

FLOWER CITY PLANT FOOD—Concentrated fertilizer or plant food especially recommended for house plants. Package, 25c. Add 5 cents if sent by mail.

Over the Back Yard Fence

Well, folks, I trust that by the time you get this far, reading my little old home-grown catalogue or Garden Book, you have picked out a nice order to send me.

Knowing so well the quality of my stocks of seeds, bulbs and plants, I just naturally feel that anyone who has any sort of garden at all would find pleasure and profit in growing few or many of the good things listed in the foregoing pages.

On the one hand, it would be silly for me to pose as a philanthropist or Santa Claus. So I'll say frankly that what I want—what I need and must have, is orders—lots of orders, and many of these must be good fat orders, if I'm to keep calling on you every spring and fall.

On the other hand, anyone who really cares for a copy of my catalogue is welcome to it so long as my supply lasts, whether you ever order anything or not. If you get some entertainment and help from these pages, I'm mighty glad to know it. And that's the point. I want to make every catalogue more than a descriptive price list.

That's why I'm devoting all these pages to informal talks and suggestions.

Some of my good and well meaning friends—hard headed, hard boiled business men—say I ought to use all this good space to list, describe and sell more goods, and send the helpful suggestions only to those who buy. And there's some sense to that, too.

But I'm kinda sot in my ways, and have an idea I'll just keep on doing as I please, which is to help you in this way with your garden problems, whether you buy from me or not.

Informal—No Highbrow Stuff

It's my purpose to make these talks very informal—just sorta like I stopped hoeing in my back yard and went over to the fence to swap experiences with you in your garden, without dolling up before calling on you or rehearsing any fine flowery speech, logically arranged and grammatically correct.

I'll leave it to the magazines to tell about English gardens, Japanese gardens, Italian gardens, sunken gardens, and roof gardens. Many of these phases have their place. But somehow I feel that what you want most right now is a few hints about some of the more common and practical points. Or, perhaps to be reminded of some things you really do know, but may overlook.

Before going a step farther I want to have a clear understanding about one thing in this connection.

I don't promise to continue these talks from year to year. I may quit any time. There is one thing that might cause me to quit. There's a growing tendency for customers to think that because I give so many helpful suggestions in my catalogue I will answer questions not covered in these talks.

This I am not in a position to do. I carry a heavy load, and every year it seems to grow bigger and heavier. It's a real man's job to look after my gardens and seed store, with ten thousand and then some, details. My success, and yours, depends upon my doing this work right. And that comes first. So don't write me about individual garden problems. Write your garden and farm magazines, your county agents, your agricultural colleges, or ask your neighbors. There's a lot of information to be collected here and there in this way. Better be swapping garden experiences than discussing all the details of current scandal and crime.

So that's that. Now that we understand the situation, let's go on with the story.

I wonder—is it necessary for me to spend

much time explaining the advantages of having a garden, a good garden, and improving the home surroundings? Seems like this is so self-evident that no long-winded plea for the home garden has a place here.

And yet, there are the most interesting and fascinating discoveries awaiting you! Yes, right there in that garden you have been hobnobbing with for years, perhaps. There are new and different varieties of vegetables; there are flowers, the form, size, color and beauty of which you may never have believed possible. Is it any wonder that gardening is becoming such a favorite pastime and hobby? One thing I like about this sort of hobby is that it isn't a one-man hobby. The whole family can ride with Dad, when he makes gardening his hobby.

Gardening Is Easy—It's Fun!

Now, let's see—where had we better commence? Well, suppose I tell you that I think many of our garden talks, cultural directions, timely tips, and so on, are too serious. We make it too hard, or seem too hard, to succeed. We may scare some aspiring gardeners out of the garden altogether.

It is true that there seems no end of things that should be learned and practiced, in order to get the best results. But, on the other hand, it's really amazing and certainly gratifying to note the worth-while results attained by inexperienced gardeners, even children, who make what would be considered great blunders, by others better informed. It's another case of "Ain't Nature Wonderful".

Nature certainly does come along and patch up a lot of our mistakes. To be sure, the more we can learn about Nature's ways and methods, and co-operate with her, the better. But, let's shelve the idea that there is any great mystery about gardening. It isn't hard. It's easy. It's fun, when you catch the gardening spirit.

As you will notice, these talks are more for the small gardener than those operating on a large scale. Commercial growers are usually pretty well informed along these lines. But if any gardener, large or small, fails to find at least one helpful tip in these talks, just mention it to one of the ushers as you pass out and your money will be cheerfully refunded.

Finding Room for Gardens

I'm up against a certain handicap in trying to fit suggestions to conditions in your own particular locality, for this reason: My catalogues go to customers scattered pretty generally over the whole United States and Canada. What I say about spading up the ground in fall and letting it freeze over winter doesn't help my friends in Florida and southern California. And you folks living where you get so much natural irrigation from the clouds, and where evaporation is very slow, can't appreciate the problems of our gardeners in Colorado and other places where we have almost perpetual sunshine, some rains, but very rapid evaporation. Therefore, you will have to pick out what you can use from the ideas I try to put across, and adapt them to your own conditions of soil and climate. Some thoughts will have to be remodeled or revamped. As Jeff has so often put it, "Use discretion", always.

Now where shall we have that garden of yours? Not much choice, as a rule. Have to take the space at hand and make the best of it. As for space, maybe you can find more by spading up some of the neglected corners or waste places. Often a few feet along both

sides of the lawn can be used—less grass and more flowers. As a rule it is better to use such space, stolen from the lawn, along the sides or lot lines, rather than to have beds in the body of the lawn. However, this is largely a matter of personal preference and fitting the flower beds to the individual yard. Often flowers can be worked in around the shrubbery. Tulips and other fall bulbs are especially adapted to this handling. Planting in borders or in groups, according to room and arrangement of shrubbery will produce pleasing effects.

Then again, it may be that a judicious or even drastic pruning of trees will help wonderfully in making two flowers bloom where but one bloomed before. Or, maybe none bloomed, because of too much shade.

Preliminary Soil Work

The kind of soil, its mechanical condition and fertility, is another important matter. Here again we have to work with the material at hand, as a foundation. Unfortunately, the soil near the average house and just where you want your finest display of posies, is the worst on the premises. This because much of it has been placed there in excavating for the basement of the house. But there is nothing serious about all this. I've taken the most wornout and unpromising soil and brought it up to a high state of friability, fertility and productiveness. Takes some time, work and expense, to do a good job.

If top soil is too light and sandy (which is seldom the trouble) you can improve it by having some stiff or clayey soil hauled in and mixed with it. If the reverse is the case (and more often it is), then you can subdue it and make it easier to handle, in several ways. If to be had, get some very fine sand, or silt, and put this on your garden 3 to 6 inches deep. Then plow or spade it under and turn it up again and keep working it over and into the native soil. The beneficial effect will last for years.

Other methods, and they can be used singly or combined with each other or this sand or silt plan, are: **Working plenty of coarse manure, leaves, or even plain straw, into the soil.** This is best done in the fall. Here again, the operation of replotting or respading several times to get an even distribution of the manure is helpful. But can be done several months apart. Might catch an open spell in winter for one operation, another early in spring, and so on. If soil especially stiff and stubborn, you might sacrifice a whole season's use of it, so as to incorporate an extra heavy coat of manure or straw into the soil. **Employing what is known as green or vegetable fertilizer.** This is the growing and turning under of green crops, such as peas, rye, barley or sweet clover. The greatest of these for loosening up soils is sweet clover. The white blossom biennial is considered best by many authorities. But if sown early in the spring and kept well-watered during the summer it will do its work in one year instead of two, though leaving it the second year if you can spare the ground is still better. Should be turned under before stems get too woody. The decayed vegetation of this or other green crops acts as a fertilizer as well as to help loosen the soil.

In fact, the trouble with most soils that are not productive enough is often not a lack of plant food, but a mechanical condition of the soil that does not liberate the elements needed by the plant. Thus the adding of humus through coarse manures, straw, leaves, green crops, corrects this condition and liberates the needed plant food as well as renders the soil more pervious to water, which is

needed to dissolve these elements the plants require and make them available or digestible. All of which is a longer story than we can go into fully here. But I've given a good deal of space to this, to start you to thinking and acting along these lines.

Watch Your Step, When Ground Wet

But there's one thing we can all do, at no expense, to help keep the garden soil in good condition for germination of seed, growth and development of plants, and ease in cultivating the crop. That is to avoid working the ground, or walking on it, when the soil is wet. Keep off, and hold off digging, planting or cultivating when ground is too wet. This applies especially to heavy or clayey soils. To test, squeeze some of the soil in the hand. If it sticks together pretty well it is just right for making mud balls, marbles or bricks, but in a bad way for preparing for a seed bed. The one exception to this is late in fall, just before freezing of ground. Then it is desirable to spade or plow the ground when somewhat wet, for it will disintegrate or pulverize better with alternate freezing and thawing during the late fall and winter.

Many visitors to my gardens think I'm grouchy because I refuse to let them run pell-mell up and down the rows of my glads and other flowers. There's a reason, and it isn't that I'm especially grouchy. Don't walk on the soil near your growing plants more than you have to, whether ground is wet or dry, but least harm done when it is dry. Keep in paths or around the edges unless cultivating or picking vegetables and flowers.

Later on I'll have something to say about "Garden Strategy", as I call it. Meaning doing the right thing at the right time, thus saving a lot of work, making what work you do more effective, and co-operating with Nature, letting her work for you even though she isn't on your payroll. I'll also try to help you "Pester the Garden Pests" after they have actually arrived.

These two subjects are closely related at times. For instance, the best time to pester some of these pests is not next summer after they show up, but right now, late in the fall and at such times during the winter as soil and weather conditions will make this not only possible but easy. (I'm writing this early in December. That's how I happened to say "now".)

Take the Cut Out of Cutworm

Take cutworms, for instance. Every season I hear complaints about the activities of these extravagant epicures of the garden. Extravagant because they eat so small a portion of the plant they ruin. Perhaps I should knock on wood when I say it, but whether it is proof of my theory or just fool luck, the truth is I almost never notice any damage from cutworms in my own gardens. If I didn't hear about them from others I might forget there are such "varmint".

And this is the way I pester these and many other garden pests. I don't quit my garden work just as soon as I harvest the crops. Just look at the average garden, and you will see how many gardeners drop everything as soon as the returns for the season are all in. My plan is to stay on the job until we get the whole garden or gardens cleaned up. All dead plants and trash not suitable for plowing under is cleaned up and burned. We give special attention to the edges, corners and outlying districts where garden pests may already have taken apartments for the winter or would like to find protection there.

Many garden pests prepare, in some stage or other, to protect themselves in the soil, at

various depths below the surface. I realize that it is a cruel thing to do, but I wait until very late in the fall, when these pests have satisfied themselves that they are well-located for the winter. Then I plow the ground deep, turning up many of these undesirable citizens to the winter elements, which work while I sleep, and cause great mortality in the garden. I haven't this thing figured out to a fine science, but so long as it works and so long as the humane society doesn't get after me, I propose to continue this heartless cruelty.

Let Nature Do the Work

This, however, is but one of the two main reasons for late fall plowing. The other is that it puts the ground in much better shape for the next season's crop than can be done by allowing the garden or field to lie flat and sodden over winter, then do all the work on it in spring. At least, you can put the soil in shape with less work. This because when thus turned over, loosened up and left somewhat rough, the soil will respond to Nature's freezing and thawing, which gradually pulverizes it better than can be done any other way, many times. Large lumps should be broken up, but the fall plowed ground should not be leveled off smooth. One reason is that when rough, little soil will blow away if high winds occur when ground is dry. The other is that the action of the frost is better if surface not smoothed and packed down until spring.

Learn More from Other Sources

Really, I didn't intend to say so much about garden pests. I fear some faint-hearted gardeners may quit before they start if hear so much about this phase of gardening. So I'll say that these pests come and go. Sometimes we may have them, or some of them, sometimes not. One locality may be troubled one season with one sort of pest while another may escape altogether or entertain some other kind. The Big Idea about mentioning them at all is to help you outwit them or head them off so far as can be done, and also to post you on what to do in case they threaten to make serious trouble. To a large extent, we can forget them in our garden enthusiasm. Just sorta keep them in mind always, and be ready for them if a pitched battle occurs. Refer to page 59 for detailed suggestions as to best ammunition and how to use it.

Space does not permit me to give specific directions for planting and caring for each kind of vegetables and flowers. That would require a whole book, or even a good part of a "five-foot shelf", for there is no end to what could be said and learned in connection with this big subject.

My idea is to cover the ground in a general way, and help you get started to thinking, investigating and experimenting yourselves. Then, for good measure, I'll go into details regarding the care of some of the flowers that are grown in most gardens. Here and there also, you will find some tips and pointers for the vegetable garden as well. With so many good flower and farm magazines to be had now at small cost, we can all glean many valuable helps from many sources.

Pansy Pointers

A little shade for pansies is good, but too much shade will cause tall, soft plants with few or no blossoms. Most all my own pansies are grown right out in the open garden with full exposure to sun. This means somewhat smaller blossoms during the hot summer days, but marvelous blossoms and great quantities of them in spring and fall.

Soil for pansies should be good and rich if possible. If can not be made so before planting, then a few top dressings of sheep or other manure, or bone meal, will help a great deal. Ammonium sulphate, to be had at any Ford garage, is also good. Any or all these can be used from time to time. Avoid fresh poultry manure, for it may burn the plants. So will too much of some other fertilizers. Use little and often when giving top dressings.

Pansy seed may be sown right out in the open garden any time in early spring as soon as you begin your first gardening. The plants will bloom from early June until hard-freezing weather. Just mere frosts will not stop a pansy bed from blooming. Here at Boulder we often pick pansy blossoms every month in the year, though sometimes may skip December or January, or both. The point is, that pansies are cool weather plants and don't need to be coddled and fussed with a great deal.

The seed may of course be started indoors along in early March or even February, and plants set out later on. In that case, keep the plants rather cool, so they make good roots but do not develop tall spindling plants. Thin out or transplant if seem too thick in box. Set box outdoors to harden plants when weather permits.

Pansy seed takes 11 to 20 days to germinate. The soil must not dry out during this period. Cover seed about $\frac{1}{4}$ inch.

Another good plan is to sow pansy seed in the fall. I sow every ten days from early August to September 20th. The reason I sow at intervals like this is to have plants suitable for taking up and shipping, from March to late May. The earliest sowings make good husky plants by time winter sets in, while the latest sowings produce tiny plants that will develop to best transplanting size in May.

For years now I've made a specialty of supplying these seedling plants, well-rooted and wintered outdoors, at such reasonable prices that many gardeners just let me grow their plants instead of buying seed and caring for the little plants themselves. However, it is still cheaper of course to start with the seed. Not a bad idea to get some plants and some seed—the plants for your early spring blossoms and the seed to supplement this early start. The best pansy plants to buy, in my opinion, are the toughened outdoor plants that will bloom soon after being set out. I always pick off blossoms and buds if set out blooming size plants, so one might as well use plants not in bloom. The immediate effect of plants in bloom is more than offset by the cost, and the later performance. Smaller plants adapt themselves better and usually prove more satisfactory.

After pansy plants have bloomed luxuriantly for a while in rich soil, and have been mauled over a good deal in picking the flowers, they get tall and ragged, and flowers not so large. Then I shear off the beds within say an inch and a half of the ground. New sprouts start up at once and in several weeks the beds again begin to bloom, and plants are more compact and sturdy. In picking pansy blossoms I always take part of the branch as well as the stem. Thus the branch, leaves, stem and blossom, make a cut flower one may never have believed possible from a pansy bed. And it doesn't take many such branches to make a nice-sized bouquet. Cut this way, pansies can be used in vases, and last a number of days. Taking the branch, down within two inches of the root, is good for the plant. Others will grow.

I know of only three pansy pests. One is a special pansy worm, not numerous, and can be dealt with by hand picking, though arsenate of lead could be used. Lice and red spiders

are the other two. Lice can be controlled by frequent spraying with tobacco solutions, mentioned elsewhere. Presence of ladybugs indicates lice. The ladybugs will, if plentiful enough, clean up the lice. Don't kill the ladybugs. Red spiders protect themselves with their fine webs, so it is hard to deal with them. Best method is frequent sharp spraying close to and all over and under the plants, with hose. They can't stand much of that.

Our Boulder climate is milder than in many places, though we do have real winter at times. Some of my older and stronger pansy plants are just left to rustle for themselves. I don't cover them at all, and they usually come through all right. The smaller ones, from fall-sown seed, I usually cover with excelsior, torn to shreds and spread over the beds just so it hides the ground—simply to prevent soil drying out and thawing out too much, and keep the winds from whipping the plants. This covering is held down by poultry wire well-staked along each side. My beds are 120 feet long and 3 to 4 feet wide. I use the excelsior on the very smallest plants from latest fall sowings. Other beds are covered by throwing the old dahlia and zinnia stalks over them. I'd use brush, too, if I had it. All covering comes off very early in spring, to keep the plants tough. Tops of plants thus wintered are tough and sure look tough at first, but the roots are strong and if the roots are good the tops soon come on fine and dandy.

Dahlia Don'ts

Don't plant the whole clump that you dug up last fall. Divide it so as to leave an eye or two on each tuber. The eyes are located near where the tubers join the base of stalk, and nowhere else. Not like potatoes, that have eyes other places than the one end.

Don't plant a tuber with badly bruised or broken neck. Many necks are ruined in taking up, storing and handling the clumps. The neck is the slim portion near the place where tuber meets the base of stalk. Some tubers, though, are almost round and have no well-defined neck.

Don't plant tuber in upright position. Lay it flat instead. Cover about 4 inches.

Don't plant before ground warms up. Gladiolus bulbs may be planted very early, but dahlias are much more tender. In our section we plant from about April 20th to middle of June. May best month in most places.

Don't forget your dahlias after planted. They may need a little watering to bring them up. Do not need heavy irrigation at this stage, however. Begin hoeing or cultivating soon as plants are up, working soil deep at first, but more shallow when buds begin to form. Many hair-like roots run far out from plants and very close to surface. Too deep cultivating cuts them off.

Don't set tubers closer than 18 inches in row and rows closer than 3 feet. More room may be given, but dahlias will thrive as close as this in good soil and with care.

Don't worry about having to stake dahlias. You can keep your plants bushy if you wish, by pinching them off after 3 or 4 sets of leaves have formed. Pinch or cut out the top of plant, leaving 2 sets of leaves, from which points side branches will be sent out. A second pinching off may be done if you wish to keep the plant still lower.

Don't get the wrong idea about the size and value of a dahlia tuber. Amateurs frequently think that the larger the tuber the better, and that a small tuber will not make good. Often the reverse is true. For one thing, different varieties make different size tubers. What might be a small tuber of

Millionaire, for instance, would be a large one of Rosa Nell. Professional growers pick out and plant the smaller tubers. They produce good roots and more new tubers, as a rule, than the large roots or tubers. We commercial growers cut off and plant only a part of large tubers, using, of course, the end that has the eye or eyes.

Don't cut dahlia blossoms during the heat of the day, if can avoid it. Very early in morning or late in evening much better. Plunge the stems in cold water soon as possible. Spraying backs of blossoms several times a day will help keep from wilting. Burning the cut end of stems or plunging them into several inches of boiling water also helps keep the flowers. Don't let steam injure blossoms. Hold them to one side.

Don't be rough with your dahlia roots when take them up in fall. Handle like soft-shelled eggs, to prevent breaking or injuring the slender necks of tubers. Take up after frosts have killed tops.

Don't break your back storing all the dirt that comes up with clump of dahlia tubers or burying them in sand or soil, unless you crave exercise. Is all right to store this way, but not necessary. Gently tap the stalk near roots, after digging, and most of the soil will drop off. But if sticky, turn the hose on and wash roots clean.

Don't let the roots dry enough to shrivel them at all before storing. We pack in barrels well-lined with newspapers, then watch and if top tubers show signs of shriveling we throw papers or old sacks over tops of barrels. This is in a dry basement. You will have to suit your methods to your own storage conditions. Before packing away, cut off stalk within inch or two of clump. Then pack the clumps upside down so any moisture in remaining part of stalk can drain out. Watch clumps during winter and give more air or less as needed. Even if dry and shrunken, they will often grow all right. Divide in spring before planting.

Don't think that dahlias will mix, planted close together. They will come true from the divided clumps, but seed never comes true.

Don't buy dahlia tubers on price basis only. There is a vast difference in the sort of tubers sent out by various growers and seed houses. Some tubers will make good and some will not. At best, some may fail, but most of us will gladly help you out in case of bad luck, even if the tuber was not at fault.

Additional suggestions will be sent with tubers ordered.

How to Grow Asters

The aster does best when brought to flower late in the season. It comes in after many other flowers have come and gone, and will bloom right up until rather heavy frosts. However, a succession is desirable, and can be had in several ways. By planting seed at intervals of several weeks from March indoors to last of May outdoors, you can prolong the aster season a number of weeks. Planting early and later varieties at the same time will also accomplish this to a considerable extent. My mixtures of various kinds in separate colors and all colors mixed, contain varieties that will not all bloom at once. Royals are medium early, Crego and Astermum a bit later, and Boulderado Beauties largest and latest of all.

Asters transplant easily and may be started indoors, but do very nicely sown outdoors any time after early April. They stand quite a little cold. Read about germinating small seed elsewhere. Plants should be set or thinned to 6 to 10 inches in the row, and

rows a foot or more apart. Extra rich ground may cause stem rot. Fairly rich ground is good, but should not be given fresh manure. Just good garden cultivation and watering should produce a fine crop, though more or less of the plants may be taken with the blight, for which there seems to be no definite preventative and no cure. This, like some insect pests, is worse some seasons than others. Some sections escape altogether every year, while others may suffer some seasons. Planting on new ground, and in partial shade often helps. East side of house or other building is good location for asters. Avoid overwatering. This often causes the "yellows" or blight.

Strawberry Suggestions

The evolution of the Everbearing strawberry means a revolution in the growing of this most delicious and popular fruit.

In some sections the spring or June bearing varieties will still be grown on a large scale. But for the home garden and now for market growers also, some of the larger improved Everbearing kinds are fast supplanting the old sorts that one has to care for a whole year with the hope of picking berries just a few weeks. I say the hope of doing so, for in many localities late frosts may leave little or nothing for the year's labor and expense.

If you grow Everbearing strawberries you don't lie awake nights worrying about possible damage from frost, hail or high water. If one promising picking is frozen your loss for the year is only partial and comparatively small, for the plants will soon bloom again and produce many pickings during the balance of the season. And the season for Everbearers lasts until way late in the fall.

NEW AND BETTER EVERBEARERS

Formerly one of the weak features in connection with Everbearing varieties was that the berries were too small after the first season. I have seen large patches of the well-known and popular Progressive, for instance, loaded with berries the second year, but on account of berries being small it was hard to get them picked at a profit. But it does seem as though some of the old kinds have sort of run out and can not be depended upon as formerly.

Fortunately, there are some newer sorts to be had now that produce a very satisfactory crop the first season, and also are keen competitors of the June bearing varieties the next spring, the berries being large and fine, bringing top prices. Then these Everbearers continue to bear, with short resting periods, all summer and fall. They will of course bear again the year after that, but it is doubtful if it pays to leave a bed more than the two years. The two varieties that I have selected from many tried out are Pride, of Denver and Mastodon. Both these are "perfect"—do not need fertilization from another kind.

Give your strawberries rich, well-fertilized ground. They are heavy feeders. Rich soil and lots of water are two main requirements. Frequent cultivation is also important. Artificial watering can be given either by running water along the rows or by overhead sprinkling. I can't see any particular difference in results if you are sure to give the plants a good soaking and often.

Set plants on level ground, not on ridges. Space the plants 12 to 18 inches in the row and rows 24 to 42 inches apart, according to method of cultivation and space you can spare. If to be worked with horse-drawn tools, make rows 36 to 42 inches apart.

PLANT EARLY IF POSSIBLE

Before setting the plants, trim off all foliage except a mere leaf or so. Also clip off the tips of the roots. Tiny roots will branch out from these clipped ends. Set plants with crown level with ground, and pack ground very tight around the roots, excluding all air. Water each plant heavily soon as set and keep soil wet for several weeks. Pouring water in each hole before planting is an excellent plan also, one of the best. Spread the roots out fan-like, rather than stick them in all in a wad, tangled and twisted.

After plants begin to take hold and show signs of growth, begin careful hoeing about them. Guard against hoeing into the roots to loosen them. Often when growth starts it will push the plant up, exposing too much of the crown and part of the roots. To prevent this, go over the patch and tramp around each plant with toe or heel, packing the soil and drawing some more soil up to the plants if seem to need it.

SEVERAL METHODS GOOD

Some growers use the hill method, never allowing runners to set, but cutting them off as fast as appear. This leaves a large plant, clump or bush where original plant was set. It is one good plan. Others prefer to let a few runners set and train them into a sort of row or hedge, keeping all surplus runners cut off, and a clear space between the rows. Still others let all runners have their own way. This is not a good plan unless you are growing for plants more than for berries. If many runners are allowed to set, it is a good idea then to dig out a good many of the plants if bed is allowed to remain more than two years, or even take some out in spring of the second year. Remove where thickest. I usually remove the old or original plant. Dig around the plants and work in a top dressing of fine manure, bone meal, Ford fertilizer, or some of each. Such top dressing good any time. Not much at a time, but every few weeks or so, near the plants, but not in the crowns.

If you receive plants real early they will probably look very bad, and even appear almost lifeless. That is because they are practically dormant. But they are really better for setting out then than later on when have luxuriant foliage and look much more promising and pleasing to the eye. So don't worry about appearance of plants.

Keep blossoms picked the first season until along early July, to give the plants a good start. Finally, don't expect every plant of an Everbearing variety to bear, or all bear at same time. The best Everbearing kinds are results of crossing with the large June varieties, and some plants will revert and bear only in June. The proportion is seldom large, but this is likely to occur. Some additional suggestions will be sent with our shipments of strawberry plants.

In our Boulder climate, I never cover or mulch strawberry plants in winter. Doubt if necessary in many sections. But if you do much them, then wait until very late in fall, preferably until ground has frozen a little. Then put coarse manure, hay, straw, excelsior or tomato vines over the bed, but not much, if any, right on top of the plants. Work it more in between the plants. Remove very early in spring.

Improvements

"Little beds of flowers,
Little coats of paint.
Make a pretty cottage
Out of one that ain't."

How to Grow Giant Zinnias

Get seed of the marvelous Colossal and Dahlia-Flowered kinds, from some good source. Big difference in stocks. Ours is grown by the firm that specializes in Zinnias and has originated many of the best varieties to date.

Zinnias are so easy to grow that there's almost "nothing to it". For largest blooms, the ground should be rich, and after plants begin to bloom they should have an abundance of water. Sure, ground must be cultivated, until plants in full bloom.

Just sow the seed out in beds where you wish the plants to bloom, though plants may be transplanted also. Sow seed thin, one seed every few inches. Cover about $\frac{3}{4}$ inch. Keep soil moist to germinate seed. Sow about ten days before usual date for latest frost. Thin plants to 8 or 10 inches, or even more, in the row. Rows about 2 feet apart.

How to Grow Cannas

Cannas thrive best in warm climate, sandy soil, full sunshine all day, and with plenty of water.

Canna bulbs or roots are slow to start, but make rapid growth later on when weather gets warm. Set the roots as close as 12 inches apart, if you wish. Plant soon as ground warms up, about middle of April to May 1st, or even later. Cover 3 or 4 inches. Frequent cultivation and plenty of water should be given.

After fall frost, cut tops off close to ground, dig and store safe from frost, in somewhat damp cellar. Or, if cellar is dry, sprinkle the roots once in a while during the winter. May be packed in boxes or set on floor. Throwing old sacks or papers over them will prevent drying out. Dirt may be left on or removed. Each spring planted single root makes a clump by fall. These are easily pulled apart the next spring before planting. Any piece with an eye or bud will grow, regardless of size, shape or appearance of roots.

Concerning Fertilizers

In addition to turning under green crops, mentioned elsewhere, use other fertilizers from time to time. Stable manures are still to be had in many places, but not everywhere. Easiest to get in fall. Demand greater in spring. Any barnyard manure is helpful in the garden, just so not too fresh and not applied too close to plants and bulbs. Beware using fresh poultry manure. Very dangerous.

Pulverized sheep manure is excellent, and quite safe to use, as not likely to burn plants. Use as top dressing near plants during growing season. Your local seed or feed store can get this for you. Commercial fertilizers of various kinds, as well as Ford fertilizer, and bone meal, good for working into soil when preparing ground or as top dressings. See Ford garage for Ford fertilizer. Use sparingly. Get the steamed bone meal. It acts quicker than the other kind.

"Irritating the Garden"

One summer evening a caller at a Boulder home asked the little girl who came to the door: "Is your father home?" "Yes," replied the little miss, "he's in the back yard irritating the garden." Of course, the caller found this man sprinkling the garden with the hose. But, the little girl may not have

been so far off after all, in using the word irritating for irrigating. It is a fact that many gardeners do just about that—squirt just a little water on the garden and lawn which does little more than irritate the growing plants. Tiny plants do need just a little light sprinkling at a time and often. But when plants are larger they want a good thorough soaking once in a while, then want to be left alone a few days, maybe a week. Is far better to give a good watering, then cultivate as soon as ground is dry enough, than to just keep irritating the garden with daily light sprinkling, which brings the feeding roots close to the surface instead of keeping them at work lower down.

Strong Talk About Mild Onions

One thing I never do is to promise anyone that a certain onion is very mild. Some kinds naturally milder than others, but any likely to be hot. Depends a lot on how grown. If growth is rapid, with plenty of water, the onions will be milder than if plants stunted, growth slow, and water insufficient. Several of our customers have reported that they find Mountain Red Globes milder than some other kinds. But why a mild onion anyhow? If want something real mild, eat an egg plant, or mushroom.

In growing onions for market, use discretion. Don't grow too many of the Bermudas produced from onion plants. They are fine, but the onions must be marketed soon after matured. Can not be kept for rise in price like the standard sorts grown from seed, such as the Southport Globes, Silverskin, Danvers, Mt. Danvers, and Mt. Red Globe.

A COMMON ONION ERROR

According to Webster:

Scullion is a menial kitchen servant who washes kettles, scrubs floors, and the like.

Scallion is a shallot, leek, or other onion that does not form a round bulb, hence, also an onion that has failed to make a slender, well-ripened neck, a thick-neck.

Better Than Agreed

There are a number of biennials and perennials that are usually described as blooming the second year from seed, and not thought of as likely to compensate us any the first year. But it is surprising how some of these do bloom the first year also, especially if planted early. Snap Dragons, Margaret Carnations, Sweet William, Delphinium, and many others bloom very nicely the first season from seed sown outdoors. I was surprised to find splendid spikes of Delphiniums one fall from seed sown the last of June. Of course they do still better after the first season. As soon as your Delphiniums are through blooming, cut the plants off. They will then bloom again the same season.

Consider Summer Mulching

Down South, and even here in Colorado, summer mulching can be employed to great advantage. This is simply covering the ground with a good thick dressing of straw, hay, or trash, after plants are pretty well grown. This keeps the ground moist, saves much watering, and winds up the season for weeding and cultivating. Understand, this is not to take the place of cultivation while plants are small, but is to be applied along in summer. It is especially desirable for such plants as Dahlias, Cannas, Asters, and all such good-sized plants.

General Suggestions for Growing Flowers from Seed

By observing these general suggestions you will be able to grow the different kinds of flowers, even though I do not give cultural directions in connection with each number on my list. Read this page once a week all season. I've boiled it down; there's a lot worth knowing and practicing in these few lines.

DO RIGHT THING AT RIGHT TIME

Unless your soil is quite sandy, be very careful about working it when too wet. Take a handful and squeeze it into a ball. If it fails to crumble when pulled apart, then it is fine for making marbles or 'dobe bricks, but too wet for working. Lay off until it dries out a bit more. You will gain in the long run. Some soils will not get over such handling, the rest of the season. You may work it down apparently fine, but there will be small lumps that will not pack well around the seed. Many times such soil will let the air in to the seed, dry it out and prevent germination.

PREPARING THE SEED BED

Next to securing the best of seeds is the matter of preparing the soil at the right time and in the right way. Every year I tell you to plow or spade up your gardens in the fall, leaving the ground rough so that Nature can work all winter for you, freezing and thawing the clods and making the ground mellow and fine for spring. Late fall plowing will also put a finish to many insect pests. I note that few people do this, but that's your loss.

You must have the surface fine and mellow to get best results, especially for fine seeds. After spading, use the rake vigorously and don't quit until you have the top soil as fine as possible.

For convenience in sowing, cultivating and picking the flowers, I like to lay off my gardens in beds about four feet wide, working from the paths and not tramping between the rows in the beds.

SOWING THE SEED

The finer the seed the shallower it should be covered. Petunia and other very fine seeds should be barely covered, other seeds that are larger should have one-fourth of an inch of soil over them, while the still larger seeds like nasturtiums and sweet peas may go down one to two inches. In this and all other work in your garden just use common sense. Imagine yourself one of the seeds and think how you would like to be treated. For extra early plants you may start the seed indoors, but for most things I prefer to wait until they can be sown in the open. I prefer the hardy, husky, outdoor-grown plants.

GERMINATING THE SEED

The smaller the seeds and the shallower they are sown the greater the danger of the light covering of soil drying out before the tiny roots get a good foothold in the ground below. Here's just where many people fail and then blame the seed and seedsman who supplied it. As a matter of fact, seeds retain their vitality for years and it is indeed seldom that failure to germinate is due to poor seed. You must neither cover the small seeds too deep nor let them dry out a single hour if covered shallow. On the other hand, you can prevent germination by flooding and keeping soil excessively wet.

Now here's a secret! After sowing and covering fine seeds very shallow, spread a thin layer of excelsior, torn to shreds, or coarse hay or straw over the bed, holding it in place with poultry netting well staked down. Or if the netting is not at hand use brush, corn-

stalks, or anything that will not smother the plants. Burlap may also be used in place of the excelsior. This prevents wind blowing the soil and seed away, and prevents seed from being floated into piles when watering the beds, and keeps the soil from drying out. As soon as the plants show up, then remove the covering.

It took me a number of years to discover that many of my failures with small seeds were due to my not getting them covered, and to slight neglect, just at a critical stage, which allowed the soil to become dry, killing the tiny roots just starting.

This drying out is a serious matter and I can't say too much in trying to impress on you its importance. You see, at best, the tiny roots from small seed are very close to the surface. Just the least dryness, and it's good night for them. That's why I advise the excelsior, burlap or cheese-cloth covering.

I used to sow pansy, aster and other small seeds on top of bed and rake them in—or try to rake them in. Now I either sift a thin layer of fine soil or sand, or the two mixed, over the seed, or, more often, I make shallow trenches with a stick or marker, sow the seed in them and cover. Sometimes I make these tiny furrows close together and sow the seed broadcast, then rake it all over gently and evenly. This gives the seed a 50-50 chance of getting covered a suitable depth. And if half the seed germinates the plants will be thick enough.

CULTIVATING AND WATERING

Weeds are great bluffers. Get after them from the very beginning in a manner that will give them to understand that they might just as well give up the battle first as last. However, weeds are useful, for they keep us digging and scratching around the plants and thus giving the top soil just the treatment it needs, but without them many would forget to keep the soil so thoroughly worked.

Remember that plants need air as well as moisture. Keep the soil loose.

Furthermore, frequent stirring of the soil conserves the moisture and if you will "Use the hoe more" you will need to "Use the hose less." Most people water their plants too much and do not cultivate them enough, and for that reason I have adopted the slogan, "Use the hoe more and the hose less." That's where you have a hose, of course. The same applies to irrigating from a ditch. Dry farmers get good results by using the hoe often. When I say hoe I mean anything from a hairpin to a tractor that will stir the soil. I use a garden rake a great deal in place of a hoe when plants are small. With some plants you can rake right over the rows without injuring the plants. Rows of gladioli from bulbets can be raked until plants are six inches high.

NOT ALWAYS TRUE TO COLOR

Do not be surprised if flowers planted in separate colors do not all come true to color. There is always a chance of slight mixing in the handling of seeds, with the best of care. Moreover, plants will "sport" at times. That is, they will produce flowers different from any known distinct variety. This is a virtue instead of a fault, for many of our finest varieties came by chance in just this way, the grand Giant Spencer sweet peas being a notable example. The new red sunflower, which originated here at Boulder, is another example. Zinnias do not all come true to color.

Garden Strategy

Often we can save work by doing certain things when conditions are most favorable, or thinking a little harder when new problems arise. Cultivating the ground with rake or hoe before a weed shows up may kill millions of them just starting. Thinning plants or weeding the rows when the ground is just moist and soft enough so the plants come out easily saves time and insures a good job. Stirring the soil at just the right time after rain or irrigation conserves the moisture and cheers the plants wonderfully. In short, by working more from the neck up we shall need to work less from the neck down.

For instance: In the fall of '21 we dug a lot of Le Marechal Foch and Flora bulbs and bulblets. The bulblets of these new varieties were valuable, so we wanted to save them all. We shoveled dirt, bulblets and all into gunny sacks after removing the bulbs from the rows. Then we washed the bulblets. This usually leaves them nice and clean, and is done in this way: We pour a pailful of bulblets, dirt, gravel and whatever trash may be included, into a wash tub. Then, with a hose, we fill the tub nearly full of water. The lighter trash, such as pieces of gladiolus roots and husks, is then floated off. The tub is again filled with water, and contents stirred or agitated rapidly which causes the bulblets to swim, but the soil and gravel remain in the bottom. Tipping the tub quickly floats off the bulblets into trays with fine wire screen bottoms. Repeating this several times separates all the bulblets, and the job is usually thus completed.

A new problem arose this time. It appears that this soil had been the happy hunting grounds of many angle worms. The worms were loath to part with Foch and Flora. In fact they were set on staying with them, through thick and thin. They refused to float off with the light trash, and were equally head strong about remaining with the dirt and gravel in bottom of the tub. Therefore we had to unscramble about two bushels of bulblets and angle worms somehow. We could employ the tedious process of picking out the worms, or picking out the bulblets and leaving the worms.

What would you have done? Plan a fishing party, inviting a score of boys, turning them loose to dig for bait in these trays of bulblets? Good! I also thought of that. Not a bad idea. But I thought of another plan. We always keep quite a flock of chickens. Occasionally, not often, they get out and romp on my gardens and my temper. Sez I to myself, sez I: "You fool fowls owe me something. Here's a chance for you to make good." So we spread the contents of the trays out thin and carried the trays into the chicken yard. As anticipated, a big white Blufforpinhorn rooster soon jumped aboard a tray and called out: "Hear ye! Hear ye! First and last call for lunch. Hurry, but don't crowd. Women and children first!"—then, rooster-like, proceeded to gobble up as much of the lunch as possible. The festive board was quickly surrounded. Soon those bulblets were clean, ready to dry and ship.

Don't Kill the Cops

If Mr. Toad is found in your garden, don't harm him, but treat him as a friend, for he is your friend, arresting and executing garden criminals.

If your sweet peas or pansies seem sick and you find lady bugs on them, don't jump at conclusions. It's lice or aphids that have injured your plants, and the lady bugs are there trying to exterminate these pests.

Why Is a Weed?

How many times have we wondered why in the world there should be such things as weeds, also insect pests. I'm still wondering about the latter, but have a very firm conviction that the weeds serve a good purpose in one way at least. If weeds didn't grow as they do, the most of us would just naturally neglect the important matter of cultivating our plants. We might say we wouldn't, but I'll just bet we would. Our gardens need frequent stirring of the soil, both between the rows and among the plants, and it is in getting after the weeds, or trying to get the drop on them, that we give our plants this much needed cultivation, letting air in to the roots, putting the food elements, that the soil contains, into such shape that the plants can get hold of and utilize them.

Don't Kill Big Weeds!

No, I don't mean you should let them remain and go to seed. Don't worry about the weed seed crop for next year. There will be ample of this anyhow. What I mean is, don't ever let the weeds get big. Cut them down, or pull them up, in their tender youth. Funny, isn't it, how we think we are really doing something great when we slaughter large size weeds, but we don't feel half that glow of satisfaction when we kill 'em off when small and when it is so much easier done. But the time to get the weeds is before they take their toll from the soil's fertility. Frequent raking, hoeing and cultivating will get the weeds just as they are sprouting or opening their eyes on a very unfriendly world—for the weeds.

How to Transplant Weeds

This is easy. It's a natural gift with some gardeners. Simply have the ground wet when you go forth to give the garden the once over. Cut the weeds off well under the roots, but don't scatter them about. Follow the hoe with your feet, packing the recently loosened soil as you go. Then to complete the job, turn the hose on before the soil has had time to dry out well after hoeing. This treatment is practically sure to leave a good stand of weeds, full of life and pep.

Headwork and Footwork

Headwork is needed in all garden operations. Footwork is valuable at times also. For instance, when sowing and covering seed in rather dry ground, firm the soil well by walking right over the row. This brings the soil in close contact with the seed and prevents further drying out. Often seed will sprout planted this way, whereas if left with only the loose soil over it, would fail to germinate. Use the rake gently over the row after this treading. In transplanting roots, shrubs and trees, it is important to tramp or tamp the soil very firmly.

Burning Seeds and Bulbs

I know a lot of families who think they just can't afford anything more than the bare necessities for the home garden. They can't figure out an appropriation for a few nice flower seeds and bulbs. They really feel that way about it.

Yet they think nothing of taking a needless spin in the flivver of ten, twenty or fifty miles. Every mile burns up a packet of flower seeds or a gladiolus bulb. "Man has two great ambitions in life. One is to own a home; the other, to own an auto to get away from home." Funny, isn't it?

Pester the Pestiferous Garden Pests

Many of these pests come and go—are worse some years than others. We never know just what we may have to deal with before the season is over, but can be pretty sure will have trouble from some of them. So the sensible thing to do is to be ready to combat these undesirable citizens. "Do them as they would do you—but do 'em fust." Have a sprayer ready.

First, we must understand that some pests will eat poison, on plants or put out as bait, while others, known as sucking insects, cannot be poisoned the same way. They must be destroyed by contact poisoning—the dope must be sprayed **directly on the insect**, and when done right, gets his goat.

Other remedies or devices are repellants, anything having a vile odor, such as carbolic acid, kerosene, turpentine, etc. Or a substance making an irritating dust, as air-slacked lime, ashes, tobacco dust, will drive the intruders away for a time. The effect of these repellants lasts a short time only and may have to be repeated. Air-slacked lime mixed with flower of sulphur is recommended as one of the best repellants for some things. Fresh poultry manure placed close to but not touching squash plants sometimes halts the bugs. Young chickens running among the vines scare the bugs away.

Then there is physical violence, in which you go to it and pick the bugs off by hand or trap them and destroy them. The hard-shelled squash bugs may be trapped by laying pieces of boards or shingles near the plants at night. The bugs crawl under them and in the morning are sluggish, when may be captured and dealt with according to law! Aster beetles may be hand picked, as generally not a great many at a time. Some use slug shot for aster beetles.

For grasshoppers take 2 lbs. bran or corn meal, mix dry with 1 oz. Paris green or arsenate of lead. Then mix with this 2 tablespoonfuls of molasses and about 1 pint water to which has been added the juice of half a lemon. Mix all together and late in evening sow it very thin, making it into flakes almost like snow. This will prevent poisoning birds or animals. In a day or two you may not see any grasshoppers, dead or alive, and will think they did not take the bait but moved on. Careful search will disclose many dead grasshoppers hidden, for the reason when Mr. Grasshopper gets sick with a pain in his tummy he wants to be alone and drags himself off to some hidden spot.

Cutworms. The same mixture is also used for cutworm bait.

Now for spraying. Practically all the insects that trouble our Western gardens, and that can be controlled by spraying, can be handled with only two kinds of dope. For poison spray use arsenate of lead, tablespoon to gallon of water. For sucking insects (lice or aphids) use as a contact poison "Black Leaf 40", one teaspoonful to a gallon of water, or Sulphur-Tobacco soap.

There are other preparations that will accomplish the same ends, but with these two and a good sprayer you can be master of the situation in most cases.

Kerosene emulsion may be used in place of Black Leaf 40, also there are other tobacco preparations, soaps, etc., that are good, though the Black Leaf 40 seems to be the most effective. To make kerosene emulsion, dissolve one pound of laundry soap in one gallon soft water and heat to boiling point. Remove from fire and add 2 gallons of kerosene and stir vigor-

ously. After this is cooled, add 10 parts water to one part the kerosene dope. This may of course be made in smaller lots, just so the proportions are kept about the same.

Sweet pea lice, or aphids, should be pestered with contact poison—Black Leaf 40, Sulphur-Tobacco soap. Don't spray with Paris green or arsenate of lead. Dashing the vines with hose discourages the lice.

Lice on cabbage may be sprayed with Black Leaf 40 or the kerosene emulsion. Throwing dust on the plants also helps.

Cabbage worms may be poisoned by spraying with the arsenate of lead solution until heads are half grown, with no danger of poisoning the heads, as grow from inside. Hot water, almost boiling, may be poured right on to the cabbage plants and will kill insects with which it comes in contact, yet does little or no harm to the cabbage. One gardener says he never fails to drive off cabbage worms by spraying or sprinkling the plants with water in which has been soaked some common tar paper. An experienced Brighton (Colo.) cabbage grower uses 1 lb. Paris green to 100 lbs. stucco, well mixed and shaken over the plants from a gunnysack.

Tiny fleas that eat turnips, radish, etc., just when they are coming up, may be controlled by shaking air-slacked lime or tobacco dust over the rows from a loose woven gunnysack. Ashes also help some.

Small striped melon and cucumber bugs generally give way if plants are dusted with tobacco dust. Good idea to have several pounds handy.

Corn root worm can be side-stepped by not planting corn in same place two years in succession.

This subject is too big by far for me to more than merely touch upon. Write your Agricultural College or County Agent for suggestions or bulletins.

To Kill Ants In Garden

Select a time when the ants are all at home, holding a family reunion. With sharp stick, make a few holes about 6 inches deep in the ant hill. Pour an ounce or two of carbon bisulphide into holes. Cover the hill with an old carpet or a Sunday newspaper. The fumes work downward and do the work. Ants may be kept off of peony buds by sprinkling them (the buds) with common pepper.

Destroying Squash Bugs

"The squash bugs, like chickens, come home to roost. I found that in the early morning a very small area contained millions of them, so I hit on the plan of killing them with a blue flame gasoline torch, such as electricians use for soldering. In about an hour I killed about 98% of all I had and have not seen a colony in years, and scarcely ever see a single bug. There was no damage to the plants, as the bugs fall on the ground as soon as they feel heat and hear a noise."—H. J. Baldwin, Minnesota.

SOME MORE BUGGY SUGGESTIONS

One market gardener says: "Mix creosote with dry soil, then scatter some of this around the hills of squash, and see the bugs go."

A dust mixture of nicotine sulphate, for which the United States Department of Agriculture will supply a formula upon application, will keep the striped cucumber beetle from cucumbers, melons, squash and pumpkin vines.

PLANT SURGERY

Sometimes plants will be benefited by a minor or major operation, as suggested herewith. I'm not saying this surgical work is absolutely necessary, but have found it helps some in my own gardening.

Asters. Even though the seed is sown out-get longer stems and better blossoms, as a rule, if you take up and transplant the plants. If two or more crowns show on one root, cut or pinch out all but one, before transplanting. Clip the tops of the leaves when transplanting. As soon as the first bud—the center or crown bud—appears, pinch it off. You lose one large blossom with a short stem, but gain by increasing the length of stems and size of blossoms of the main crop.

Cabbage. Cut off the tops of leaves—about one-third—when transplanting, unless plants are quite small. Some plants have two crowns. Pinch out one. Some are blind, having no crown. Throw such away.

Cannas. Divide the clumps that you take up in the fall. A small root will make a good plant and a clump of roots by fall.

Canterbury Bells. Pinch or cut off every blossom as soon as it begins to fade. Keep plants watered and cultivated and they will bloom again the same season.

Cobea Scandens. When the plants are 4 to 6 inches high, pinch the tops and they will thicken up and make a denser covering.

Dahlias. Here's where nerve is required. small tuber is good then a big one is better doors where the plants are wanted, you will You may have the mistaken notion that if a and an undivided clump best of all. Absolutely wrong, especially regarding the clump. The clump **MUST** be divided if you want fine large blossoms. See suggestions elsewhere in "Garden Secrets" for dividing. Don't think you can yank off the tubers and that they will sprout from all parts like a potato. The eyes are all near the stem. Far better throw away the surplus, if do not have room to plant all the divisions, than to plant the whole clump. Better to give them to those who will appreciate and care for them.

To keep dahlia plants low and more bush form, and help to prevent their blowing over, pinch out the top when the first three pairs of leaves are developed. To get largest blossoms keep the plant pruned to only a few branches and then pinch off most of the buds, leaving the terminal one. Buds usually appear three in a cluster. Pinch off the two lower ones, leaving the center or terminal one. To make plants bloom their best late in fall, after the hot weather, cut the plant back within a foot of the ground along in July. New shoots or branches will develop and produce blossoms.

Daisy, Shasta. Cut them with long stems and a good deal of the foliage as fast as the blossoms come to full size. They will bloom again, and continue blooming if kept cut.

Dandelions. Cut the roots off just a little below the surface, as most people do when trying to rid the lawn of this pest, and the portion of the root left in the ground will make two or more dandelions grow where but one grew before, especially if you don't sow some clover and blue grass where the digging has been done. The grass tends to discourage the ambition of the dandelion root.

Delphiniums. Suppose to bloom once in a season, but by cutting them back as soon as they have bloomed you get another crop.

Gladioli. In cutting the flowers be sure to leave not less than four leaves to mature the bulb. Better leave six leaves or even more. Keep your glad bouquet looking fresh

and cheerful by cutting off the faded blossoms daily, and at the same time cutting an inch or two off the bottom of the stem. Make this cut on a slant. Change the water daily also. A glad bouquet should last at least a week, if spikes are cut when first blossom opens. Large gladiolus bulbs may be cut into 2 to 4 pieces before planting. Peel off the husk. Cut so as to get a portion of the root surface, also an eye, on each piece. Each piece will make a good flowering plant and a nice new bulb. Dust the cut surface with powdered sulphur. The cutting should be done the same day of planting.

Grass, Lawn. Begin cutting the new lawn as soon as the grass is several inches high. Cutting seems to thicken it up. Good plan is to cut often and let the short clippings remain on the lawn. Some of the best lawns I have seen never have the cuttings taken off the whole season through. This mulch also combats the dandelions, especially preventing dandelion seed from getting a start. Will not kill old roots of dandelions.

Gypsophila. (Perennial or Baby's Breath.) You can prolong the season of bloom by cutting back some of the plants when they are six inches to a foot high. They come on again, but flower later than those not cut back. Gyp roots may be pruned severely when transplanting.

Hollyhocks. In transplanting hollyhock roots, prune them quite a bit. They send out many fine roots from near the cut surfaces. It even benefits roots not transplanted to dig around them in the spring, and shove a spade down so as to cut some of the branching roots. If tops have made much growth before transplanting, then cut back the tops almost to the crown. But don't cut off the blossom shoot if it is showing plainly.

Iris. Sooner or later your iris clumps should be dug up and the roots pulled all to pieces and reset. Some cutting may be required, but usually the clumps divide naturally and can be pulled apart. A small division soon makes a good sized blooming clump. That's why the price paid for a root of some new and fine kind proves a valuable investment. Better discard some the older, less desirable sorts, if room limited, and keep adding some the newer kinds. Avoid planting iris in same soil that has had iris before. If do not wish to change location of iris bed, then dig out the old soil and put in some new.

Melons. If size rather than quantity is wanted, then pinch off all blossoms and small melons but a few. Prune back the vines also. Same with other vine vegetables, such as pumpkins, squash, "cukes," etc.

Pansies. Often the tops grow too fast for the roots, if to be transplanted. Don't be afraid to cut or pinch back the tops if they are at all tall and "sprangly." It is not really necessary to keep the blossoms picked for several weeks after setting out the pansy plants, but picking the blossoms and buds closely will give you better plants for later blooming. And when any plants get quite tall and "loppy" and untidy looking, cut them right off to within 2 inches of the ground. Water and cultivate and within two weeks or so you will have blossoms again and better ones than if had not been cut back. If plants turn brown the chances are the red spiders are at work. At first appearance of this, cut back the plants partially at least, so you can get at them from all sides and beneath the foliage with the hose. Give them a good sharp spraying daily and you will beat the spiders in their game.

Peonies. The clumps of peonies do not require dividing often, but if taken up the roots should be cut into several parts, each with several eyes. For some reason or other a large peony root seldom makes good when transplanted. Best results come from small divisions. Largest blossoms can be had by disbudding. Leave only one bud to a stem.

Petunias. Make them bushy and sturdy by pinching off the tops when the plants are a few inches high. Or, good size plants may be cut off and new shoots will develop, making a large bush.

Roses. The following suggestions I have taken from a helpful book, "How to Grow Roses", published by Conard & Pyle, West Grove, Pa. Price \$1.50, prepaid. Better send to this firm and get the book, for it gives many details I have not quoted.

Two and three year old plants should be cut back severely at time of setting out, in spring. Leave only 3 or 4 buds on Hybrid Perpetuals and about 6 on the Teas and Hybrid Teas. Cut stem just above a bud that points out. Pruning determines the size and quality of the flowers.

Hybrid Teas and most other hardy roses should be pruned in March. The tender roses, Teas and Hybrid Teas, need not be pruned until April, when the sap begins to flow and buds begin to swell.

If few but extra large and fine flowers are wanted then cut out to the base all but three to five shoots and cut these back so as to leave only 2 or 3 eyes to the shoot. The more shoots you leave and the longer you leave those that remain, the more flowers you will get, but they will be smaller than if less shoots are allowed to grow and these cut back nearer to the ground. In cutting out shoots, always remove the old ones and leave those of the previous season's growth. This is recognized by its fresher, smoother, and lighter colored appearance than the old wood. The strongest shoots should be saved, and care given to placement of these that will produce a symmetrical bush.

Sweet Peas. Plant surgery should be employed daily on your sweet pea vines after they begin blooming. The more you cut the more you have and the longer the season of bloom. Like many other flowers, sweet peas were never intended for stingy folks. The more you cut and give away the more you have, and the longer they keep blooming. Try picking sweet peas without cutting, but instead of pulling the stems away from the stalk, push towards it.

Swiss Chard. "Eventually, why not now?" Slowly, many gardeners are learning the value of this plant. As noted elsewhere, Swiss Chard is useful in several ways. It is one of those "cut and come again" vegetables, but instead of cutting off the entire plant you just cut or pull off the outer stalks. New ones keep growing from the center so that a continuous supply of greens may be had all summer and fall, from an early spring sowing. But Swiss Chard may be sown any time until along in July.

Tomatoes. If growth is rank it is well to keep the plants pruned back so as to develop larger fruits.

Thinning. Don't neglect thinning so as to give each plant enough room to develop well. I don't know of any set rule, for much depends on what is to be thinned. But watch your rows and begin thinning early, leaving the strongest plants. A second thinning may be desirable, or even a third. Often in thinning you can transplant and fill in vacant places. Always water transplanted plants at once.

Strawberries. In setting out strawberry plants, cut off the tips of the roots. Many new, fine, hair-like roots will develop on account of this operation. And the tops

should also be trimmed back so that just several crown leaves show. If plants are taken up real early in spring, they may yet be dormant, with no green leaves showing. Though apparently dead they do splendidly if set out at this stage, provided the ground does not freeze before they get rooted. Too much freezing of the ground may cause failure, but mere frosts do no harm to plants wintered in the open with no covering.

Sunflower. A neighbor's cow gave me a little interesting demonstration in plant surgery. She reached through my fence and ate off all the leaves and branches of some fine double Chrysanthemum-flowered sunflowers I had planted for display along the north side of my home garden. It looked like a case of "All is lost," but I just let the naked stalks remain and kept them watered and cultivated. They soon sent out new growth at the joints and before fall were fine symmetrical, bushy plants, with many branches loaded with golden double flowers.

In this connection I recall an experience with zinnias, reported me by a good customer, Mr. Samuel Yaggy, at Syracuse, Kansas. He said that when his zinnias were several feet high a hail storm cut them down so just the bare stalks remained. But to his great joy Nature came forward with an armful of spare parts and fitted up those plants so they bloomed gloriously after all. That's one thing about damage from hail—we should never be too sure that all is lost. Often Nature will come to the rescue and save the day.

Put the Garden to Bed

Here's where you need to "use discretion." In providing winter protection for plants, many gardeners overdo a good thing by applying too much cover. Get the idea, once for all, that the protection is not so much to keep the frost out as to keep it in, and you will have better "luck." It is the drying out of the soil, the alternate freezing and thawing, and the whipping by the winds, that harm our plants in winter. And, strange to say, the danger is greater in our mild Colorado climate than in some much colder sections. This for the reason that where snows come early and remain all winter the snow gives the needed protection.

In our section, we cover raspberry bushes completely with soil, after bending them down as close to the ground as can be done without breaking them. This should be done before the leaves have fallen. Some cover grape vines the same way; others let them rustle for themselves. It is hardly necessary to cover grapes. Strawberry plants usually come through fine with us, with no winter protection, but if you do mulch them with straw or coarse manure, be sure to put most of the covering between the rows and plants and very little, if any, on top of them. A little coarse covering on top is good, but be careful. Don't smother the plants with heavy coat of manure.

Pansies usually live over if covered and cared for as suggested in my special instructions for growing pansies, given on another page.

About all I use for putting my gardens to bed is excelsior, dahlia and zinnia stalks. Nothing very heating about these, thrown lightly over the beds. Yes, leaves are good for some things, but apt to smother such plants as pansies. I never use them on such small plants. They are all right to work in around rose bushes and other shrubs. Some protect roses by forming a mound of dirt up around each plant, 10 to 12 inches high, just before the ground freezes. Later they may put on a covering of straw or leaves. Or, the latter may be used without the hilling up.

Be sure to anchor all covering, if you have winter winds like we do here. By leaving some dirt on the Colossal zinnia roots and turning the root end of the plant west, toward the prevailing winds, these seldom blow off. The excelsior is held in place by poultry wire, well staked down. Where available, pine boughs are excellent, or even brush without foliage will answer for many things. Peonies, iris, gypsophila, need no protection.

Rotate Your Crops

That is, don't plant same kind on same ground year after year. Different plants take different things from the soil, to some extent. Different pests attack different plants (some living over in location where operated the previous season). Plant root crops where peas and beans were last year. Plant tomatoes where corn was, etc.

How to Grow Onion Sets

Ordinary sets (bottom sets) are nothing more than regular onions grown so close in the row that they cannot grow to large size. Withholding water also prevents their growing large. The seed is sown in rows, but the rows are made wider, 3 or 4 inches, instead of the usual narrow row. Long experience and judgment are required to produce sets well-matured and of ideal shape, but this is worth experimenting with on a small scale. 80 to 100 lbs. of seed to the acre are used for commercial set growing. For small garden use, an ounce for 25 to 30 feet of row—wide row. Red Wethersfield is used for growing red sets; Yellow Danvers for yellow, and Silverskin for white. Brown Australian and Mt. Danvers are also good.

To Make Head Lettuce Head

Use any heading variety I list, although Denver Market and Prize Head seldom make true solid heads. Iceberg and Hanson are fine for home garden, as both can be used as leaf lettuce also. Los Angeles is best for market. Fine for home, too.

Lettuce will seldom head in hot weather, unless grown in shade. It is a cool weather plant, doing best very early in spring, or late in fall, as head lettuce. The cool climate of the mountains is ideal for head lettuce. That's where the carloads are now grown for shipping. This is becoming a big and profitable industry in Colorado.

Sowing head lettuce seed late in fall, just before ground freezes, is one good way to get an early start the next spring. Very early spring sowing—March or early April is good. Bear in mind that the ground should be good and rich, and that the plants should be thinned or transplanted to 6 to 10 inches apart. Then they should be hoed often, the oftener the better. You can't expect to pluck large solid heads of lettuce from a bed in which the plants are as thick as the proverbial hair on the proverbial dog's back.

Peony Pointers

Although we might like to buy and plant big clumps and have them bloom freely the first season, yet this is not Nature's way. Plant divisions any time in fall or very early in spring. Fall is best. There is some advantage in planting strong one-year or two-year plants, but larger clumps will be a disappointment. Size of divisions often misleading. A small division from a 2 to 4-year-old plant is often better than a larger one from an older plant. Size of root not so very important either, as new roots are formed. Takes several years for peonies to show true to name blossoms.

Never neglect the peonies after they have bloomed. The care and regular watering you give them after blooming until fall produces, vigorous buds that will insure large and fine flowers the next year. As one peony grower sees it, the roots may be likened to storage batteries, which should be charged after blooming for the next flowering season. Fertilize by spading in manure around but not very close to peony plants. Never let the manure get close to roots or on top of the plants. This is important.

Doctoring Sick Plants

Do all you can to keep plants healthy, nipping insect attacks in the bud, so to speak, and promoting steady healthy growth by sensible care and cultivation. After a plant gets very sick, you'd better remove and destroy it, than spend much time trying to bring it back. Sure, there may be exceptions.

Would You Chew Wood?

You'd have a fit if the Missus would serve kindling and twine with your radish, turnips, beets, snap beans, etc. Yet many times these are served old and tough, and full of woody fibre and stringy entanglements. To avoid this, use vegetables when young and tender. To have them so when wanted, plant often. Don't think of planting radish, beets, beans only once. Plant every few weeks and see how nice it is to have them crisp, juicy and tender.

Iris—the Foolproof Plant

Give the iris half a chance and it will grow and thrive. Roots should be planted very shallow, just so well covered. Plant most any time of year, except when in bloom. Fall is ideal. Early spring is O. K., too. Iris needs only a small amount of water to do splendidly. Will thrive under rather dry and unfavorable conditions. Is a boon to dry farm gardens. A small division will sometimes, not always, bloom first year, and do fine after that. In a few years it produces a large clump which may be divided and re-set, making a dozen iris grow where only one grew before.

Cinnamon Vines for Shade

They make a nice background by training the vines over fences and unsightly objects. By planting the largest size roots and planting them early, the vines will provide more shade the first year than most anything else. And after the first year they do still better. Roots remain right in the ground, so one planting is the total expense and trouble. In very severe climates, it is well to mulch the roots for the winter. Plant the roots nearly a foot apart, laying root flat, and covering about two inches. Use large roots for best results. Unlike a dahlia root, the cinnamon vine root will grow even if broken into several pieces—each piece will grow. Quicker growth is obtained, however, if the terminal eye on small end is retained. Very slow to start. Be patient. Better mulch first winter.

"Keep the Ball a-Rolling"

The old idea with many folks was to have one big spring gardening spasm, followed by spasmodic cultivation and let it go at that. But now, with garden space so valuable, and produce from the garden so expensive, and also more appreciated when it is fresh, we are learning how to get the greatest efficiency from our gardens.

Companion and succession crops are planned, to use space to best advantage and for as long

a portion of the season as possible. Companion crops are early and late maturing kinds grown in alternate rows, so that when the early crop is off the late one may occupy the whole space for balance of the season. For instance, early radish, beets, lettuce, may go between rows of cabbage, tomatoes, squash or melons.

Succession crops are those following each other. The ground used for green onions from sets, radish, lettuce or early peas, may be used after these crops are off for celery, late sweet corn, beans or turnips. Two, three or even four crops of some things may be grown one after the other in a season.

LONG'S Random Remarks

Forget it. You can't expect to cut asparagus from a newly set bed. Should be cut very little, if any, even the second season. That is, if you want a good permanent bed that will deliver the goods. See page 6 of Hand Book.

Try planting morning glory and castor bean together. Thin to one plant of each in a hill.

Tomatoes thrive best in loose soil. Try digging large hole for each plant, and filling bottom with chopped sods. Avoid tramping ground close to tomato hills. Tomatoes respond to rich soil. They do not require great quantities of water.

Get most of your peas in early. Peas do best in cooler part of the season. Beans, however, thrive all summer until killing frosts. Here at Boulder we plant beans up to July 15th, and even as late as Aug. 1st.

Carrots do not require a great deal of water if well cultivated. Too much water often causes them to split open and rot. Make sowings up to middle of July for nice tender table carrots.

You can grow your own cabbage plants by sowing the seed right outdoors for main fall crop. Sow in April. Thin when small so each plant has room to become sturdy before being set out. If sow seed late, then use an early variety. Nothing better than Copenhagen Market.

Turnips grow fast. Sow from early spring to Aug. 1st. About July 15th to 25th is best for main fall or winter crop. Odd corners and ground from which early crops have been removed may be sown to turnips. Be sure to thin them early, if very thick.

Spinach is a cool weather plant. Runs to seed in hot weather. That is, the usual kinds do. Try New England for hot weather. Common spinach should be sown very early in spring. Better yet, sow in fall, either in September and let it get a start in fall and winter over, or just before ground freezes, so will come up early in spring.

Are you growing salsify (vegetable oyster)? If not, why not? Just fine for soup. Plant April or May. Thin to 2 inches, so as to get fewer roots but larger ones. Small roots are harder to clean and prepare for cooking.

Cucumbers come to beat the band in warm weather. May be planted up to Fourth of July, or even later.

Ever grow Kohl Rabi? Take a chance on a nickel package.

I know a good gardener who plants his melons twice, whether they need it or not. First planting is made early. If escapes frost, he has an early start. But the second planting is in same rows, but made a week or so later. In case the first planting freezes off, the second one is there all ready to pop through, and comes on earlier than if

the patch were replanted after frost. Cost of seed is a small item compared with results from early crop. If both lots escape frost, the late one is hoed out.

My sales of Swiss chard are increasing by leaps and bounds, as people learn to appreciate this vegetable. Read about it in catalogue. After serving all the different purposes mentioned there, the roots can be taken up late in fall, transplanted into boxes and put in cellar near window. Will go on growing and providing splendid crop of greens for winter use.

Table beets should be planted every few weeks up to middle of July, to supply nice tender young roots as wanted all summer, and for canning. A great big "whopper" beet may be all right for exhibition purposes or to feed cows and chickens, but for table use the beets should be pulled when only partly grown.

In setting out an asparagus bed, make the rows 2 to 3 feet apart, and set plants 12 to 15 inches in row. Make a trench so the plants may be set just deep enough that the crowns will come 3 to 4 inches below level of ground. Spread the roots out flat, instead of jabbing them down straight. Fertilize the ground heavily each year between the rows, digging the manure into the soil. Don't waste effort filling deep trench with manure, as the roots do not go down deep. Fertilizer on top will seep down to the spreading roots.

Cauliflower heads best late in fall. You can grow your own plants from early-sown seed out in the garden, same as mentioned for cabbage. Tie the cauliflower leaves up to protect the head and keep it white. Do this when head is yet small.

Everlasting flowers are very popular now. Great quantities are grown and sold to florists, flower stores and art shops, for basket work and winter bouquets. See additional suggestions in my catalogue.

Rutabagas take longer to grow than turnips, so latest planting should be made not later than early July.

Get the jump on the garden pests by having a sprayer and several kinds of dope on hand before the pests show up. "A shot in time, saves nine."

Very early plantings, when ground is still cold except just on top, should be shallow. If seed gets down too deep in the cold wet ground it may rot. But later, when soil is warmed to a greater depth, you may plant deeper. In this connection it seems reasonable to suppose that we should not plow or spade ground deeply early in spring and plant at once in the soil that has been turned up from below, and has not yet had time to warm up. This is another reason for fall planting. Plow or spade deeply in fall, then give the top shallow spading or cultivating before planting in spring.

How do you transplant tomato plants? Do you just cover the portion of the plant that was in the ground before? Set your tomato plants very deep, so that more than half the plant is under ground. Some large and lanky plants should have three-fourths their length under ground. Pinch off all leaves except the few to remain on top of ground. If plants are extra large or tall, lay them on a slant in shallow trench, thus keeping all parts near the warm surface. Tomato plants take root all along any part of plant covered. Tops are not whipped and broken by winds when set this way. Set other plants deep also, just so you don't cover the crowns. Always water them at once, if possible.

Here's where many gardeners make a mistake: They think that rich soil is necessary to germinate and start seeds in boxes indoors or in hotbeds. Seeds require just heat and moisture to germinate. Given these conditions they will germinate with or without soil. In trying to make soil very rich for starting plants indoors, one is apt to burn the tiny plants. Use just any fine loose soil at first, and give rich soil after setting out in the garden. That's the principle I work on with my hardened pansy plants.

Theoretically, if you plant extra early, medium and late varieties of peas at the same time you will have a succession, one variety maturing after an earlier kind has come and gone. But in practice it doesn't always work out this way. Too many are likely to come on at about the same time. Better make some plantings a little later, sowing the extra early ones first. Try Ameer (Giant Alaska) planted just as early as the ground can be worked nicely. Then a little later, and when ground is warmed up somewhat, plant Laxtonian or Blue Bantam. In a week or so put in some Dwarf Telephone or some other medium to late varieties.

In very small gardens it is not advisable to use space for squash, pumpkins, or even sweet corn, for there are many other things that will produce much more valuable vegetables on same ground. Let the large gardeners and farmers grow some of these vegetables which require considerable room.

Never plant just one row of corn. No matter how few hills you may have, arrange them in blocks, several hills or more each way, so the ears will stand a better chance of being fertilized. Otherwise the ears may be only partially filled.

Try this for germinating parsnips and other seeds you have had trouble getting to grow. Make a small trench the right depth for whatever seed you are sowing. Nearly an inch deep would be all right for parsnip. Now wet the bottom of trench thoroughly. Sow the seed. Cover as usual, with soil not muddy. Sprinkle the covered row, so covering is well moistened. Either keep row just moist by light sprinkling, or as soon as top dries a little, run over it with the rake to break the crust and make a dust mulch. Running a small furrow next to the seed row, and letting water run down it, is another way of insuring sufficient moisture.

Heavy, stiff clay soils, or, in fact, most any kind, can be loosened and improved by sprinkling a pound of lime to 10 square feet and working it into the soil a month or so before planting. Do not use lime and manure the same season.

Park Your Hens at Home

Time and again customers have told me how a neighbor's White Shorthorn pullet or Jersey Red rooster has wrought havoc in their pansy beds, or laid waste a promising crop of tender lettuce or luscious Laxtonian peas. When I say, "Why not kill off a few—fried chicken is sure fine, and even roast hen is nourishing," they reply that otherwise the owners of these Bolsheviks are fine neighbors, and they hate to have any trouble with them.

Now, friends, listen! You have my permission to keep all the chickens you wish—but please park them on your own lot. Look to your fences. If clipping one wing does not suffice, try clipping the tail—close behind the ears. There, I knew you meant all right, but have been careless. Glad you see the point. In behalf of your neighbor, I thank you.

To Grow Fine Sweet Peas

One secret in growing finest sweet peas is getting them into well-prepared ground rather early in the spring. True, later plantings often do well, but the sweet pea thrives best under rather cool, moist conditions. If given a chance the sweet pea will send its roots way down deep into soil that keeps somewhat cool and moist even in hot weather. But it must get an early start to make this deep root growth. Deep digging and pulverizing of the soil encourages this deep root development.

It is not necessary, however, to break your back digging a ditch deep enough for a water main, though some trenching is good. In doing this, lay aside the top soil, dig and pulverize the subsoil, mixing manure with it, then put back the top soil. Many growers do not fill the trench quite full, but draw the soil to the plants as they come up. But planted on fairly good soil, well-worked up, and on level ground, sweet peas will usually do nicely. A good scheme in either plan is to make a trench say nearly a foot deep right up close to the sweet pea row. Fill this trench with manure. Some soil may be put on top. Then during the season turn water into the trench once a week or so. The enriched water will find its way to the sweet pea roots and stimulate growth. A little bone meal worked into the soil at time of planting is also good. But use this sparingly, as it is very strong. Avoid use of fresh poultry manure.

An ounce of seed will sow from 15 to 20 feet of row. Cover 2 inches, firming with the feet if ground not wet. Begin cultivation as soon as plants are up. Water by running a small ditch along the row, giving a good soaking once a week or so, rather than just a little every day. But the sprinkling system may of course be used instead. Lice or aphids often check the growth. Watch for them. Spray with contact poison, getting under the leaves, where these pests are most numerous. Remember you can't kill lice by putting poison on the plants. The tobacco or kerosene emulsion must hit the lice to do the work. Dashing the vines several times a day with the hose checks the work of lice. Give the vines support and train them to it, beginning early. Keep blossoms picked. The more you pick them the more and longer they will bloom. To pick sweet peas, grasp the stem close to where it is attached to main branch, push towards, not away from, the branch. It parts easily from branch this way.

Your "Aggie" College Will Help

Write these colleges asking for information concerning your special farm and garden problems. I receive many inquiries that should be sent to the Agricultural College. I can't give the time to answer, even if I had the data at hand, but the college is at your service and is paid for this work. You will find the professors very obliging in such matters.

Some states do not have separate Agricultural Colleges, but handle this work in connection with their universities. In either case, just address your inquiry to **Agricultural College**, to town or city I give herewith, and you will reach the department you wish. Here are some of our western state "Aggies":

Colorado, Fort Collins. **Idaho,** Moscow. **Iowa,** Ames. **Kansas,** Manhattan. **Minnesota,** St. Paul. **Montana,** Bozeman. **Nebraska,** Lincoln. **North Dakota,** Agricultural College. **Oklahoma,** Stillwater. **South Dakota,** Brookings. **Texas,** College Station. **Wyoming,** Laramie. **Utah,** Logan.

Here's To Your Health!

Time and again I've talked about the advantages of growing your own vegetables—having them fresh from the garden, and more of them. Have told you how such noted doctors as Mayo, Wiley, and others who ought to know, recommend eating more "garden sass" and as fresh from the garden as possible. Have told you how digging in the soil and pottering around among your flowers is bound to react favorably on your health. And a lot more.

But seems like everything to be said along these lines has a string to it. Naturally, if you follow my suggestions, I or some other seedsman will benefit from your garden activities. Naturally, also, I sorta feel that I'm the logical seedsman to be benefited. For two reasons: I help you, when you buy Long's "Tried and True". That's one reason. The other is that I need the benefit. There you are—two good reasons.

Now to prove that I'm a good sport I'll tell you a few things "for your health's sake" that don't concern me in the least—except, of course, that the longer you live the longer I'll have a chance to sell you something. So it does seem like we can't get away from the selfish side of any proposition.

Really, though, I can't mention much, if anything, that you don't already know. However, it has been well said that we don't need so much to be informed as to be reminded. So I'll remind you of a few things that will tend to keep you on the main highway to good health and longer life.

Drink more water. How much? Well, at least twice as much as you've been drinking will probably be none too much. Begin with a glass first thing in the morning. Don't eat more than 25 kinds of food at one sitting. Just a few kinds for one meal is better. Don't eat as if your car is parked at the curb with motor running, waiting for you. If you must hurry, eat only part of the meal. Eat less as you approach middle life. Slow down. Have tonsils examined and teeth X-rayed and follow advice of your doctor and dentist. (Those who wear store teeth may skip a line or so here.) Don't run to catch a car or a bootlegger. There'll be another one along soon. If worrying produces satisfactory results— aids digestion; sweetens the breath and disposition—then worry to beat the band. Remember, "An apple a day keeps the doctors away" and "The whiter the bread the sooner you're dead". And, of course don't forget the Saturday night bawth.

Don't take unnecessary chances. Don't do fool stunts. Don't make a super fool of yourself by trying to win the loving cup in a coffee drinking or egg eating contest. Don't jay-walk. Relax. Don't keep keyed up 16 hours a day. Have a hobby. But ride it instead of it's riding you. Walk at least a block a day. You need the exercise. Saves gas, too. Don't shy at fresh air. Think much about good health, little of your ills. Don't pour over all the details of scandals and murders. Read something else also. Do a kind deed once in a while, if only for the reaction on yourself. Smile sometimes and rest your face. Don't take yourself, or anyone else, too seriously.

Don't run your motor in closed garage. Monoxide gas is deadly but gives no warning. Don't try to capture a bandit. That's the policeman's job. Don't try to teach the road hog a lesson. You'll be dead just as long as though you were wrong. Don't argue with wifey if she tells you to come along to a bridge party—unless the hammer, loose table legs, and other artillery are beyond reach. Smoke fewer cigarets and drink no booze.

No Orders Filled On Sunday

Please don't waste good money on telegrams, air mail letters, special delivery letters, or burn up gas driving to Boulder, with the idea that we will fill orders on Sunday. We are willing to do all but break our necks trying to fill orders promptly six days a week. I'm not saying we will all be found in church on the seventh day, but we sure need to let up one day in seven during the strenuous rush season to avoid nervous prostration or sudden death. Thanks. I knew you would take this in the right spirit when you understood the situation.

We Have No Agents

Owing to the popularity of Long's Tried and True seeds, I receive many requests from merchants wanting to handle our seeds on commission, or buy in bulk to sell again. So I'm taking this opportunity to explain that, with only several exceptions, we sell only direct to the planter. I appreciate the compliment when merchants and others say they have heard so many good words for our seeds that they would like to handle them. But I sure like to deal direct with the "ultimate consumer". This lessens the chances for mistakes and misunderstandings. Occasionally, I contract for an unusually large amount of seed of something I know to be especially good, such as the two onions, Mt. Danvers and Mt. Red Globe, and can spare some to dealers at wholesale. Even then, I prefer that you buy this seed in our own sealed packages. We will seal lots of 5 pounds or more of this onion seed for dealers, if requested. The only merchant handling our seeds is W. D. Schoolcraft, of Longmont, Colo. We once owned his store, and have never had the heart to refuse Mr. Schoolcraft's annual request to continue selling our line there. He is so enthusiastic, and says he just must have our seeds, so I fit him out each spring.

"Your Subscription Will Expire"

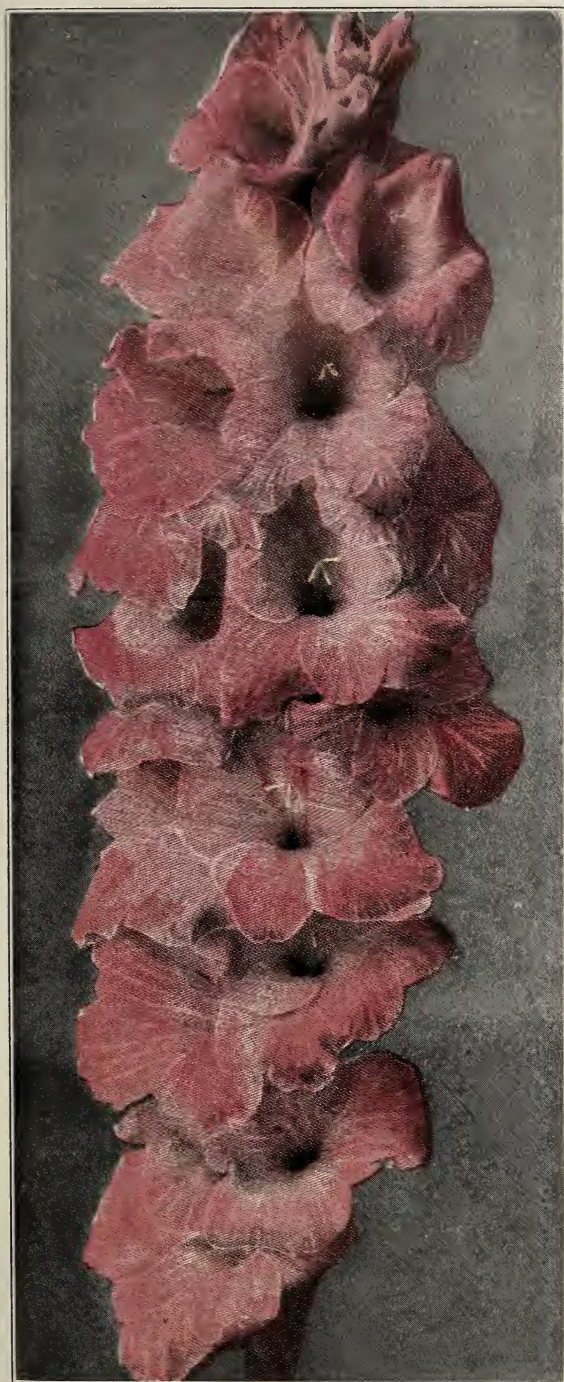
As the magazines announce: "Your subscription expires with this number." There's one way to renew your subscription to a magazine. Pay up.

There are two ways to keep Long's Garden Book coming to you each January. One is to send me an order. That puts you in good and regular standing for two years more. The other way is to request a copy. This is not quite so certain as the other way, because it isn't a case of "Women and children first", but "Customers first". After those who have ordered within two years have all had catalogues, we are glad to send to others on our list as long as our supply lasts. Every spring we have to refuse some late requests.

Of course, I don't expect an order from every one every year. No mail order house does. But I sometimes wonder how many of you folks are like the lady who told the druggist she believed in dividing her business between him and his competitor down the street. Told him she always bought her postage stamps from him and had her prescriptions filled at the other store. Seems to me sometimes that all I do for some of you is to supply stamps (being garden talks, etc., in this case) while some one else fills your subscriptions (seed and bulb orders). Not that I care at all, you understand, but I just wondered if you ever thought of it in that way!

"Your Colorado Sunset hollyhock has just bloomed and we are much pleased with it."—Wakefield Floral Co., Charlotte, N. C.

Special Offers of Rare Glad Bulbs



GLADIOLUS, W. H. PHIPPS

Well named "The Wonder Glad"—Note: The coloring of this sample spike of Phipps is not accurate and does not do the glad justice.

"Surprise" Assortments

You will be surprised and pleased with the extra good value in these assortments. Space here is limited. So explanations and descriptions must be brief. See Glad pages for more complete descriptions of varieties.

Note carefully: Bulbs in these "Surprise" Assortments will vary in sizes, all being $\frac{3}{4}$ -inch or larger. All good blooming size bulbs. Some will be much larger than $\frac{3}{4}$ -inch.

Assortment "B"

16 bulbs Dr. Bennett (bright red)

Assortment "BO"

17 bulbs Break O'Day (pink)

Assortment "GF"

6 bulbs Golden Frills (yellow)

Assortment "J"

33 bulbs Jewel (pink and cream)

Assortment "LA"

25 bulbs Los Angeles (shrimp-pink)

Assortment "NH"

17 bulbs Nancy Hanks (orange-pink)

Assortment "WHP"

12 bulbs W. H. Phipps "The Wonder Glad" (iridescent La France pink)

Assortment "S"

5 bulbs Mrs. P. W. Sisson (pink)

Assortment "TZ"

18 bulbs Tycko Zang (pink)

Assortment "YW"

5 bulbs Yellow Wonder

Prices:

Your choice of any one of the above assortments for \$1.50.

Any	2 for	\$ 2.60
Any	3 for	3.75
Any	4 for	4.80
Any	5 for	5.75
Any	6 for	6.60
Any	8 for	8.40
Any	9 for	9.20
Any	10 for	10.00

All prepaid in U. S. (You may select assortments alike or different ones to take advantage of quantity rates.)

Order Early: Good idea to give second choice in case some sold out.

LONG'S Giant Exhibition Asters



Boulderado Beauty

Form or type of flowers illustrated above. Plants very vigorous, 30 to 36 inches tall. Flowers, immense and fully double, are borne on long, strong stems, and last two to three weeks after cutting.

- | | |
|----------------|---------------|
| A20 Shell Pink | A21 Rose Pink |
| A22 Lavender | A23 Purple |
| A24 White | A25 Mixed |

Price for any color or mixed: **Pkt. 10c;**
 $\frac{1}{4}$ oz. 50c.

Early Royal Asters

A strain of Early Giant Asters, especially valuable for cut flowers on account of their long, strong stems that are almost free from side branches. Same form as Boulderado Beauty, but not so large.

- | | |
|----------------|---------------|
| A12 White | A13 Purple |
| A14 Shell Pink | A15 Rose-Pink |
| A16 Lavender | A17 Mixed |

Price for any color or mixed: **Pkt. 10c;**
 $\frac{1}{4}$ oz. 40c.

Special Any 7 Pkts. listed on this page for 50c
 (See Flower Seed pages for other Asters)

THE J. D. LONG SEED COMPANY

Boulder, Colorado